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A Qualitative Inquiry of Elementary Charter School Teachers' Experiences of Coping and Thriving

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A Qualitative Inquiry of Elementary Charter School Teachers' Experiences of Coping and Thriving

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Dedication

For my wife, Kristi Michaels, who inspires me, and my parents, Don and Judy Lineback, for their steadfast love and support.

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A Qualitative Inquiry of Elementary Charter School Teachers' Experiences of Coping and Thriving

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The University of Texas at Austin, 2018

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This dissertation document is a manuscript-length document, which I plan to submit for publication to *Teachers College Record* in the fall of 2017. As a manuscript-length document, it is shorter than a traditional dissertation. In order to supplement the manuscript, I have included an expanded literature review and the study's proposed methodology as an appendix following the manuscript.

While research on stress in the teaching profession has a long history, researchers have only recently begun to investigate how some teachers thrive in their jobs. Such research has typically examined the experiences of all teachers, however, rather than focusing on those who maintain a sense of wellbeing at work. Extant literature has also found that charter school teachers leave the field at twice the rate of their traditional public school peers, leading some to believe that they have a more difficult time thriving as educators. Thus, the current study examined the experiences of certain charter school teachers who, theoretically, should have a sense of occupational wellbeing. Using the transactional model of stress as a framework, participants took a quantitative measure of risk for occupational stress, called the Classroom Appraisal of Resources and Demands (CARD). Qualitative methodologies were used to interview 16 elementary charter school teachers, whose CARD scores indicated that they were at lower and average risk for stress, about their experiences coping and thriving at school. Findings suggest that teachers use a variety of resources and strategies to cope, and that certain aspects of their school environments can contribute to their wellbeing. The study also points to two conclusions about the those with lower and those with average risk for stress. Teachers who were, based on the CARD, at lower risk for stress were indeed coping and thriving. Findings for teachers at an average risk for stress were mixed, however. While some seemed to have the personal and professional resources they needed to cope well, others seemed to be overwhelmed by the demands of their jobs. Implications for future research, as well as limitations, are provided.

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Introduction

Teacher stress is a well-documented phenomenon: it has been examined for many years (Kyriacou, 2011), and a recent survey of 30,000 teachers in the United States found that 70% often perceived their jobs as stressful (Layton, 2015). Much research has examined the negative impact of stress on teachers' occupational health: increased stress has been associated with lower job satisfaction (Fisher, 2011), higher intentions to leave the profession (Gilbert et al., 2014), and higher attrition (McCarthy, Lineback, Boyle, Fitchett, & Lambert, 2016). Less research exists, however, on teachers who prevent stress altogether, cope successfully, and thrive at work.

In recent years, stress and coping researchers have drawn on work in positive psychology, taking a strengths-based approach to understanding factors that promote wellness and allow people to thrive, even in challenging situations (Greenfield, 2015). From this perspective, it seems important to understand the experiences of teachers who are at lower risk for stress in order to help teachers build coping skills and to create policies and environments where teachers can thrive. Such changes may be particularly beneficial for charter school teachers, who exit the field at approximately twice the rate of traditional public school teachers (Sass, Flores, Claeys, & Pérez, 2012; Stuit & Smith, 2011). Researchers have employed quantitative methodologies to determine what factors account for the increased turnover in charter teachers (e.g., Stuit & Smith, 2011), but there is no research, to our knowledge, studying how members of this group are able to cope successfully and thrive. Given that the number of charter schools continues to rise (Kahlenberg & Potter, 2015), understanding how certain charter teachers are able to thrive and continue teaching is vital for the future of charter schools.

Using a qualitative approach to investigate this topic could allow for a highly contextualized understanding of teachers' personal experiences and interpretations, which could help administrators change policies and work with teachers in a way that allows them to thrive. The current study sought to fill the gap in this line of research by studying charter school teachers who are at lower risk for stress and examining what factors allow them to prevent stress, cope successfully, and thrive. I used a mixed-methods approach, employing quantitative methods

to identify teachers who were at lower and average risk for stress, and qualitative methods to capture rich information about teachers' lived experiences. This study was undertaken with two goals: (1) to help administrators and teachers understand what allows teachers to thrive and (2) to inform future research with quantitative measures of teacher risk for stress.

Review of the Literature

The theoretical model of stress and coping that guided the classification of teachers in this study will be reviewed first. Next, research on factors that contribute to stress will be reviewed. Where possible, I have included research on charter school teachers, but in some cases, research in charter schools is lacking. Lastly, research on teacher coping and thriving, stemming from recent work in positive psychology, will be reviewed.

Understanding and Classifying Teachers' Risk for Stress

The current study uses a well-established model to conceptualize the stress process, the transactional model, which posits that individuals become stressed when they perceive that they are unable to cope with the demands they encounter given the resources available (Lazarus & Folkman, 1984). *Demands* are events that have the potential to be harmful to an individual's goals. For example, in teaching, a demand could be a student refusing to do their work (McCarthy, Lineback, & Reiser, 2014). *Resources* are the assets that an individual has to help deal with demands, such as personal skills (i.e., the ability to motivate the student to do work), other professionals (i.e. the school guidance counselor), and a number of other assets (Matheny, Curlette, Aycock, & Junker, 1993). Central to this process are the perceptions, or appraisals, of how helpful resources are and how challenging different demands are, rather than their simple presence or absence (Lazarus & Folkman, 1984). When individuals appraise that they have enough, or, even, a surplus of, resources to meet the demand, the individual sees the demand as a challenge and will likely cope and thrive. When resources are seen as inadequate, the individual will likely experience a stress response (Lazarus & Folkman, 1984).

There is an important distinction between risk for stress, which is the concept used in the current study, and the stress response. *Risk for stress*, for the purpose of this study, refers to an individual's appraisal that demands exceed resources (Lazarus & Folkman, 1984), which can result in the *stress response:* the emotional, cognitive, and physical symptoms of stress. The stress response can be measured physically, including increased cortisol levels and activation of the sympathetic nervous system (Persson & Zakrisson, 2016), but, of course, the appraisals that

place one at risk for stress cannot be measured physically, and operationalizing this construct, has historically eluded stress researchers (McCarthy, Lambert, Lineback, Fitchett, & Baddouh., 2015). To my knowledge, there are no studies of charter school teachers' risk for stress using the transactional model.

The current study used the Classroom Appraisal of Resources and Demands (CARD; Lambert, McCarthy, O'Donnell, & Wang, 2009) in order to identify teachers with a lower risk for stress. The CARD was developed to assess teachers' appraisals of their classroom demands against appraisals of their classroom resources, allowing researchers to assess teachers' risk for experiencing occupational stress (Lambert et al., 2009). Teachers' appraisals are fundamental to understanding their risk for stress; appraisals can explain how one teacher in a school can experience a great deal of stress, while the teacher in the next classroom might be thriving (Chang, 2009). The CARD classifies teachers into three groups of risk for stress based on their responses to the Resources and Demands sections of the CARD: (1) the Resourced group (Resources > Demands), (2) the Balanced group (Resources = Demands), and (3) the Demands group (Resources < Demands). According to the transactional model of stress, the Demands group is hypothesized to be at greatest risk for stress (see Figure 1). Recent research used a nationally representative dataset and found that approximately one-third of teachers are at highest risk for stress using this classification system (Lambert, McCarthy, Fitchett, Lineback, & Reiser, 2015).

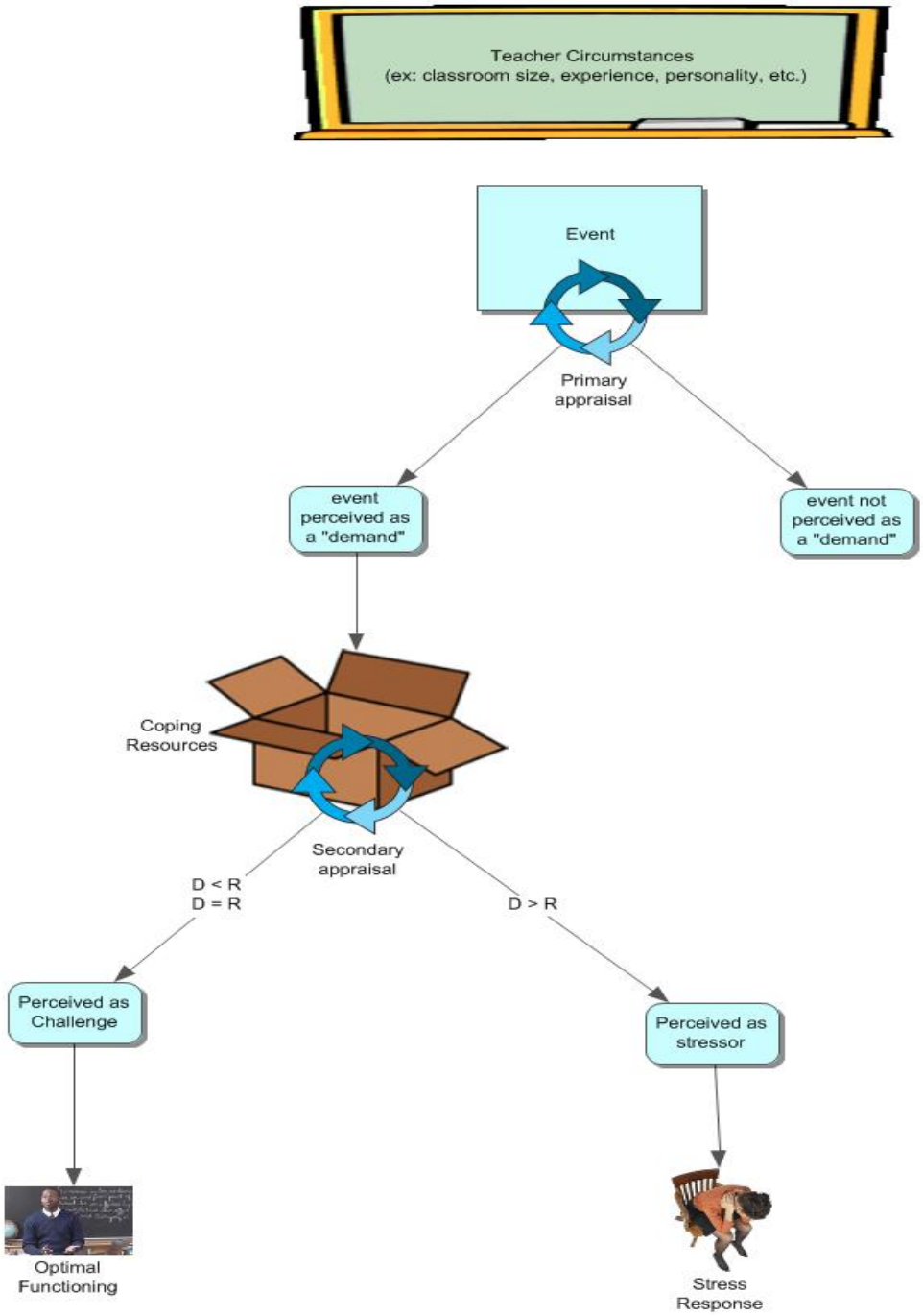

Figure 1: Transactional Model of Teacher Stress (McCarthy, Lineback, & Reiser, 2014)

Aspects of Teaching Environment Associated with Stress

Teachers' experiences in their classroom and in their schools can contribute to whether they experience a stress response. It is important to note that not all teachers will appraise the

same demands as a challenge and will not appraise the same resources as helpful. In this section, I review two aspects of the teaching environment that research shows are associated with teacher stress, but not universally: student misbehavior and workload. When possible in this section, I describe research from charter schools, but that research is not always available.

Student misbehavior and classroom management. Student misbehavior is frequently found to be one of the most demanding and stressful parts of teaching (Chang, 2009; Eskridge & Coker, 1985; Sutton, Mudrey-Camino, & Knight, 2009). Specifically, certain types of classroom incidents are consistently associated with teacher stress. Students talking out of turn, students being idle or slow, and students hindering other students were found to be the three student behaviors (out of a total 12 tested) that had the greatest contribution to teachers' stress levels (Clunies-Ross, Little, & Kienhuis, 2008). It is noteworthy that these behaviors were not major misbehaviors, such as physical aggression. Rather, they were relatively minor issues. Thus, it appears that minor misbehaviors, when occurring frequently, may be associated with higher levels of teacher stress. Other studies have found that students' disrespectful behaviors were the behaviors cited most often as stressful for teachers (Friedman, 1995; Lopez et al., 2008). Not all teachers, however, find student misbehavior to be a demanding or stressful aspect of their job (Kokkinos, Panayiotou, & Davazoglou, 2005). It seems, then, that teachers' appraisals of student misbehavior, and the resources they have to address it, have an impact on whether this contributes to a stress response.

Workload. The concept of teacher workload is another important aspect in the context of studying teacher stress and coping. While the research does not have an exact definition of *workload*, it is typically operationalized as the number of hours teachers work (Malloy & Wohlstetter, 2003). Some studies have found that charter school teachers typically have an increased workload when compared to traditional public school teachers (Malloy, & Wohlstetter, 2003; Ni, 2012), while others have found no significant difference (Stuit & Smith, 2012). One review of charter schools found that their teachers are typically working 60-80 hours a week and that school leaders are aware that the high workload leads to burnout and turnover (Lake,

Dusseault, Bowen, Demeritt, & Hill, 2010). A qualitative study of 40 teachers in six urban charter schools found that teachers worked long hours and were worried about themselves and their colleagues eventually burning out (Malloy, & Wohlstetter, 2003). A case study of a second year charter school teacher found "her life…was almost completely devoted to the classroom. [She] worked each morning before the sun came up and stayed at school until after it set" (Clark, 2010, p. 215). This teacher also reported that her colleagues were equally consumed with work, even noting that their school administration expected them to put in 80-hour work weeks, which she found appalling. At the same time, however, she accepted that an incredibly high workload and a resulting high level of stress were simply part and parcel to her job as a teacher in her school (Clark, 2010).

A study using data from 25 schools within one charter management organization found that 14% of teachers rated their workload as unmanageable (Torres, 2014), which implies that these teachers appraised their workload and demands as exceeding the resources they have to cope. These teachers also left their jobs at a much higher rate than their peers (Torres, 2014). The study by Torres (2014), highlights the perceptual nature of workload: it is not simply the number of hours of work that is stressful. Rather, it is individual teachers' appraisals of the workload being unmanageable that causes some teachers, but not all, to have a stress response. More research needs to be done about teachers' appraisals of their workload.

Teacher Coping and Thriving

Within the literature on teacher coping and thriving, researchers typically investigate the experiences of all teachers, rather than focusing on teachers who are at lower risk for stress only (Beltman, Mansfield, & Price, 2011). Presumably, based on the fact that 70% of teachers find their jobs "often stressful" ((Layton, 2015), a large percentage of teachers might not be thriving. A major goal of this study was to understand how teachers who are at lower risk for stress (i.e. in the Resourced and Balanced groups on the CARD; Lambert et al., 2009) are preventing stress and thriving. Using this perspective allows for a more focused understanding of teacher wellbeing and could help administrators create policies and environments where teachers can

truly thrive. In the following section, I will review extant literature on teacher coping and thriving, while making the case that a different perspective might advance literature in the field.

Traditionally, stress and coping researchers have studied how individuals cope with demands they have already encountered, which is called *combative coping* (Matheny, Aycock, Pugh, Curlette, & Canella, 1986). Combative coping, or coping that occurs after an event has been appraised as stressful, involves using available resources to develop cognitive and behavioral strategies to meet the demand that has already occurred (Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen, 1986). Lazarus and Folkman (1984) delineate two types of combative coping. When using *problem-focused coping*, an individual tackles the demand directly, while *emotion-focused coping* involves attending to the emotional response that the demand triggers (see Figure 2; Lazarus & Folkman, 1984).

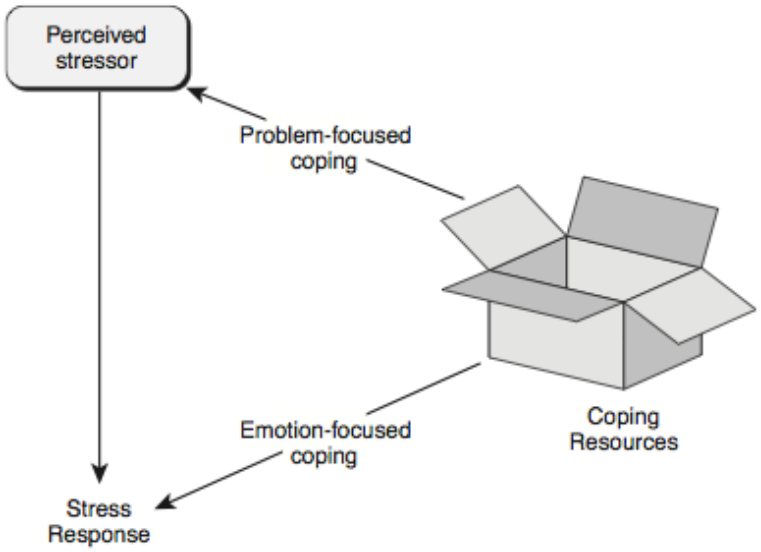

Figure 2. Illustration of the Combative Coping Process (McCarthy, Lineback, & Reiser, 2014)

In more recent years, and from a positive psychology perspective, there has been increased interest in *proactive coping,* which allows individuals to build up resources in order to cope adequately with future demands or prevent stress altogether (Aspinwall & Taylor, 1997). Proactive coping was defined by Aspinwall and Taylor (1997) as "any behavior in advance of a stressful event with the purpose of preventing it or modifying it before it occurs" (p. 417). When

using proactive coping, individuals are not preparing to cope with a specific demand, but are instead acquiring skills and resources to prepare for general demands (Aspinwall & Taylor, 1997) and prevent them from turning into stressors. Proactive coping occurs before a demand becomes stressful and focuses on preventing or minimizing, rather than withstanding, stress.

Research on proactive coping has followed the trend set by positive psychology, which focuses on strengths and positive traits of individuals, what makes life meaningful, and what allows people to flourish, rather than focusing on pathology (Seligman & Csikszentmihalyi, 2000). The goal of such research is to create environmental conditions and build individual skills to promote wellbeing. The main individual skill that current positive psychology literature tends to focus on is a construct called *resilience*, which investigates the characteristics, practices, and thinking that allows individuals to thrive in challenging environments (Greenfield, 2015). Teacher resilience is a relatively new area of inquiry and has been defined as "a dynamic process or outcome that is the result of interaction over time between a person and the environment" (Beltman et al., 2011, p.188). Two recent reviews of resilience in teaching claimed that, while there are common threads across studies, the field has not reached consensus on all of the factors involved in teacher resilience (Beltman et al., 2011; Greenfield, 2015).

Beltman and colleagues (2011) found that resilience was defined as the ability to cope with a setback, to return quickly to a normal level of functioning, and to maintain a sense of wellbeing. The authors concluded that although there seems to be a consensus on what contextual factors are necessary for resilience (mainly support from various relationships), they found nearly 30 distinct individual factors, leading them to conclude that the individual factors for promoting resilience were highly "idiosyncratic" (Beltman et al., 2011, p. 193). Similarly, all four teachers in a qualitative study on building resilience drew upon different protective factors when dealing with stress (Doney, 2013). The authors of the study found that, when encountering stressful situations, "each individual handled that stress differently, calling upon various combinations of support systems, physical activity, and direct action to alleviate the stress." (Doney, 2013, p. 657). The author's description of resilience seems, in essence, very similar to

combative coping, or coping after a stress has occurred. The current study aimed to capture coping and environmental conditions that occur before an event becomes stressful.

The two reviews of teacher resilience research mentioned earlier note both a lack of consensus on what factors promote resilience and what constitutes resilience in teaching and a need to further refine the study of resilience in teaching (Beltman et al., 2011; Greenfield, 2015). Because of the lack of consistency in the research, this study argues that a new approach is warranted in order to contribute to the body of literature. Applying a coherent framework for stress and coping, paying particular attention to proactive coping, could promote a richer understanding of teacher stress and coping from a positive psychology perspective. Instead of studying all teachers, I sought to understand teachers who were at average and lower risk for stress, how they appraise their classrooms, and what allows them to cope and thrive successfully. Studying this specific group would allow for an understanding of how school environments and individual factors help teachers prevent stress and thrive in their work. Furthermore, because charter school teachers have anecdotally higher stress working environments and statistically higher attrition than traditional public school teachers, it is vital to understand how these teachers are thriving in such challenging environments.

Methods

The current study sought to explore the experience of stress and coping for elementary charter school teachers who were at lower risk for vocational stress. I wanted to understand how teachers, in their own words, were able to successfully cope and thrive in their school settings. I first recruited a number of teachers to take the CARD (Lambert et al., 2009) and then selected participants who fell in the Resourced and Balanced groups for qualitative interviews that examined the following research questions:

1. How do Resourced and Balanced elementary charter school teachers describe what allows them to thrive?
2. What types of coping strategies and resources are these teachers using?
3. In what ways do Resourced and Balanced teachers differ with respect to research questions one and two?

Measures

The measures included a demographic survey and the CARD administered via Qualtrics. The CARD was used to classify teachers into three groups and determine which teachers to interview, and the demographic information was used for descriptive purposes. The subsequent interviews served as the study data and will be described after the measures.

Demographic Questionnaire. The Qualtrics survey included basic demographic questions about the teachers' identities and information about their teaching experience and preparation. Questions I asked participants can be found in Table 1, the table describing the interview participants.

Classroom Appraisal of Resources and Demands (CARD; Lambert et al., 2009). The CARD has two sections. The Demands section is composed of 35 items asking participants to rate how demanding they find specific classroom occurrences, for example "children who do not follow directions" and "meetings you have to attend." Participants rate each item on a five-point Likert scale from 1 ("not demanding") to 5 ("extremely demanding"). The Resources section has 30 items of potential school-provided resources, including "administrators at your school" and

"materials for children performing below grade level." Participants are asked to rate how helpful each resource is using a 5-point Likert scale (1= "very unhelpful" and 5= "very helpful"). See Appendix A for the complete list of CARD questions.

The methodology for using the CARD to classify teachers into three Appraisal groups—Resourced, Balanced, and Demands—is well-established and provides a parsimonious way of identifying which teachers are at risk for stress (for a review of CARD research, see McCarthy et al., 2015). CARD analyses assign participants a Demands and a Resources score. Next, researchers create a difference score, called an Appraisal Index, by subtracting the Resources score from the Demands scores. The difference score is called an Appraisal Index because it represents teachers' appraisals of whether the classroom demands they encounter outweigh the resources they have to meet those demands. A 95% confidence interval is then created around an Appraisal Index of 0. Teachers with Appraisal Indeces above the upper limit of the confidence interval fell in the Demands group, teachers with difference scores less than the lower limit fell into the Resourced group, and teachers whose differences scores were within the confidence interval fell into the Balanced group (McCarthy et al., 2015). The typical distribution of Appraisal Index scores and classifications can be seen in Figure 3 below. Only teachers in the Balanced and Resourced groups were invited to be interviewed.

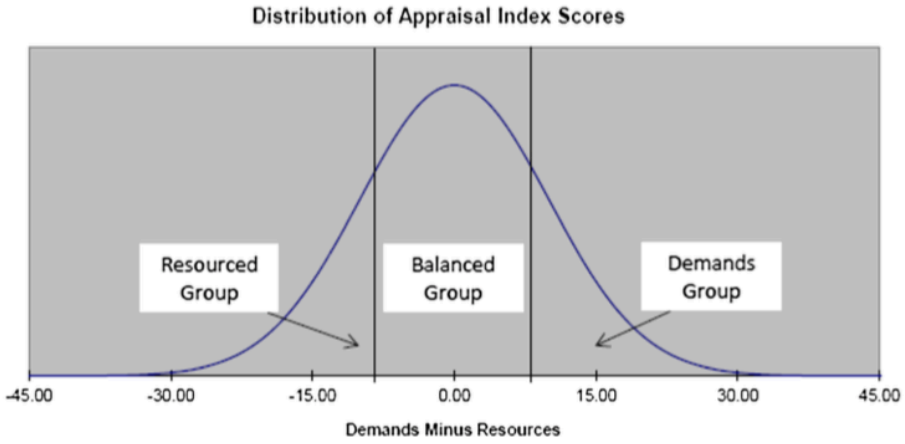

Figure 3: Distribution of Appraisal Index Scores and Group Classifications (McCarthy et al., 2015)

Procedures for Recruiting and Selecting Participants

Recruiting Participants. Individuals of interest in the study were teachers from the Southeast or Southwest who taught in charter schools that were run by large charter management organizations, rather than single charter schools. Elementary teachers were chosen because the CARD was originally designed for use with elementary teachers, and this population has been the primary focus of several CARD studies (Lambert et al., 2009; Lambert, McCarthy, Fitchett, & Eyal, in press). First, I emailed recruitment information to a number of different already-established contacts, including administrators with two major charter school networks, teachers and staff at charter schools, and Teach For America staff and alumni. I asked these individuals to forward my recruitment email to potential participants. Second, I posted the study announcement on social media. Third, made use of charter school websites that had administrator contact information publicly available. I sent these administrators my recruitment email.

Selecting Participants. Individuals interested in the study followed a link to the Qualtrics survey. Participants' CARD scores were analyzed, and teachers were classified into the three groups: Resourced, Balanced, and Demands. Teachers who fell into the Resourced and Balanced groups *and* who indicated that they were interested in the interviews were contacted via email. A total of 55 individuals began the Qualtrics survey. Five people completed the survey but did not qualify (they were either principals or high school teachers), and 15 people did not complete enough items to score. Thus, 35 individuals qualified for and completed the survey. Descriptive statistics on those individuals can be found in Appendix C. Thirty of those individuals were in the Resourced and Balanced groups, and five were in the Demands group. Twenty-six Resourced or Balanced teachers indicated interest in the interviews. My pool of potential interviewees was, thus, 26 people. I reached out to 21 of those individuals—five failed to respond or follow-through with the first interview. All 16 remaining participants completed the interview process. Typically, in research with the CARD, the participants are about evenly split among the three groups (McCarthy et al., 2015).

I have a few hypotheses about the low number (5) of participants classified in the Demands group. First, my recruitment materials clearly stated that I was studying teachers' experiences of coping and thriving, and individuals who felt that they were not coping well and thriving might have been reluctant to participate. Second, many teachers who are feeling stressed might not add another task to their plate, such as taking a 20-minute survey. Third, some school leaders I communicated with decided to forward the recruitment materials to specific teachers rather than their entire faculty, and teachers at lower risk for stress were likely the target of those communications.

Participants

Of those 16 teachers, 13 identified as female, three as male. They ranged in age from 23 to 60 years old, with a mean of 28.19. They described their race/ethnicity as follows: seven as White, four as Latino/a or Hispanic, two as African American/Black, one as Asian, one as multiracial, and one as White/Jewish. They ranged in years of teaching experience from 1 to 30, with a mean of 4.65. Seven were self-contained teachers, while the others taught one or two subjects or worked in reading interventions. All worked in schools where the vast majority of students receive free or reduced-price lunch and identify as racial/ethnic minorities. Additional demographics are located in Table 1.

Table 1

Participant Demographic Information

Pseudonym	Age	Gender	Race/ Ethnicity	Total years teaching	Appraisal Group	Grade Subject	Geographic location
Ashley	27	Female	White	3	Resourced	3rd, self-contained	urban
Billy	40	Male	White	3	Resourced	4th, social studies	urban
Isabel	60	Female	Hispanic	30	Resourced	1st, self-contained	urban
Tina	25	Female	Asian	2	Resourced	K, math, literacy	urban
Anna	23	Female	White	1	Resourced	1st-4th, music High school choir	rural
Sarah	26	Female	White	5	Resourced	1st-4th Reading Interventions	rural
Charlene	32	Female	African American	2	Resourced	1st, self-contained	urban
Tegan	23	Female	White	1	Balanced	1st, self-contained	urban
George	23	Male	Hispanic	2	Balanced	1st, self-contained	urban
Mallory	26	Female	African American	4	Balanced	3rd, Math	urban
Ben	23	Male	Jewish, White	2	Balanced	1st, self-contained	urban
Maria	25	Female	Latina	4	Balanced	1st, self-contained	urban
Katie	25	Female	White	4	Balanced	K-5, Art	urban
Jenny	24	Female	White	3	Balanced	1st; reading intervention 3rd-5th	urban
Debbie	25	Female	Multiracial	4	Balanced	3rd, math	urban
Veronica	24	Female	Hispanic	4	Balanced	4th, math	urban

Interview Procedures

Through email, a convenient time for the initial interview was agreed upon by myself and the participant. I conducted all interviews via video-teleconferencing services. All interviews were audio-recorded and lasted between 35 and 70 minutes. A research team member transcribed each interview. I then read over the transcription and noted areas to probe or clarify in the follow-up interview. The 15 to 30-minute follow-up interviews were conducted mostly over phone. Those interviews were then transcribed and added to the initial interview transcription.

Interview Protocol. The interviews were phenomenological and semi-structured, with set questions, while allowing for follow-up questions or clarification as needed. The interview protocol was based on research in teacher stress, coping, and resilience. I then piloted the questions with two teachers and based on their feedback, I made slight adjustments to the

protocol. The follow-up interview contained three additional questions and any clarification questions. The full list of questions can be found in Appendix B.

Research Team

Within qualitative methodologies, the researchers are important instruments of the study. Because of the potential for researcher bias and positionality to influence the data (Hill, Thompson, & Williams, 1997), a team of four researchers, with varying levels of experience in teaching and research, composed the research team. I assembled the team purposely to include individuals with different experiences in order to reduce the bias of any one member. I am a female former teacher who came to teaching through Teach For America. I have many connections to public charter schools, including the fact that my wife is a middle school principal at a public charter school, though I taught in a traditional public school. I conducted all interviews and led the analysis team. My familiarity with and connection to K-12 education, particularly with charter schools, aided my ability to recruit participants and understand the common language that K-12 educators share. Other members of the analysis team transcribed interviews and analyzed the entire set of data. One female member is a former traditional public school teacher who is a doctoral candidate in educational psychology. Another member is a male undergraduate in psychology, and the final member is female graduate of a master's program in experimental psychology without any experience in the education sector. My advisor, a male professor in with expertise in stress and coping in education, and a male graduate student in counseling psychology audited our coding process. In discussing the interview data, we remained open about our biases and perspectives, and we challenged each other when we thought the biases might be unduly influencing the coding process.

Data Analysis

Team members transcribed interviews verbatim, aside from filler words (i.e., "Like," um," or "you know") and encouragers from the interviewer ("mmhmm," "okay," etc.). Transcriptions were emailed to each participant, who had the opportunity to make clarifications

or changes. Once the transcriptions were finalized, data analysis began. The interviews were analyzed following the guidelines of Consensual Qualitative Research (CQR) (Hill et al., 1997).

The team developed domains, or topics of interest, by independently reviewing two of the interviews and keeping the research questions and interview protocol in mind. We then came together to discuss the domains and arrived at consensus. We applied those domains to another two interviews in order to ensure they accurately described the data. Slight adjustments to the domains were made. Next, the team individually read two interviews from the Resourced group of teachers and two from the Balanced group in order to develop a list of core ideas that described the themes appearing in the interviews. The team then met to arrive at consensus. Once the initial core idea list was established, the team coded another two interviews and made adjustments to the core idea list. Some core ideas were consolidated in order to avoid redundancies and overly specific core ideas. Next, the entire team re-coded all 16 interviews.

The auditors were involved in every step of the process. The auditor who is a professor looked over the initial core idea list after four interviews had been coded to see if it fit with extant literature and to make suggestions to streamline the list. Suggestions were taken back to the research team, and the team agreed. For example, we initially had subdomains within the *Proactive Coping* domain, but the auditor did not think the literature or study data supported such a categorization, and he suggested removing the subdomains. Next, the student auditor read over each coded interview after the consensual meeting to see if he agreed with the core ideas in the context of the entire interview. Between zero and five times in each interview, the auditor made coding suggestions from what the team had coded. The team discussed and agreed with many of his suggestions, though there were a few we declined to incorporate as we decided they did not fit with the overall coding process.

Then, I put all of the interviews and core ideas into Dedoose, a software that helps qualitative research organize data. Dedoose allows researchers to print documents of all excerpts of a given core idea. Next, I used Dedoose to develop frequencies for each core idea and to pull out representative quotations in order to help with the writing process. Lastly, I met with one

member of the research team to further consolidate core ideas that were thematically similar. For example, the core ideas of *administrative support* and *administrative support for self-care* were combined and then called *effective administration*.

Validity Concerns

Threats to validity were addressed in several ways. First, I engaged in member-checking by giving participants were given the opportunity to read their transcriptions and make changes or clarify points, as suggested by Hill et al. (1997). Second, members of the data analysis team had diverse experiences within education, research in education, and charter schools, reducing the likelihood of researcher bias. Third, having the research team members individually code the interviews before coming to consensus allowed for all perspectives to be equally heard. Fourth, I asked for clarification in follow-up interviews, allowing time to settle any ambiguity in the initial interview and prolonging engagement with participants. Fifth, the research team actively looked for and discussed discrepant data (Maxwell, 2013) in order to revise core ideas, if necessary. Sixth, peer debriefing with two auditors who did not participant in the research itself served as both inquiry and confirmatory audits (Lincoln & Guba, 1985).

Findings

The present study included three research questions. First, how do Resourced and Balanced elementary charter school teachers describe what allows them to thrive? Second, what types of coping strategies and resources are these teachers using? Third, in what ways do Resourced and Balanced teachers differ with respect to research questions one and two? The first and second research questions were answered by looking at the domains and the core ideas, described in the next section. I analyzed the third research question by investigating how many participants in each group (Resourced and Balanced) mentioned each core idea to identify patterns in the data that might shed further light on what makes these groups unique. Given that the third question involved a reexamination of findings, it is reported on in the discussion.

Table 2

Domains, Subdomains, and Core Ideas

Domain, *Subdomain,* Core Ideas	Resourced Teacher N	Balanced Teacher N	Total N
Personal Resources			
Experience*	5	3	8
Mindset	6	7	13
Outside of school factors	6	7	13
Personal attributes	5	4	9
Positive School/Job Factors			
Effective administration	7	9	16
Good professional development	3	3	6
Good relationship with manager	6	6	12
Leadership opportunities*	0	4	4
Lower stress job assignment*	4	2	6
Positive environment	7	8	15
Proactive Coping			
Healthy habits	5	8	13
Time management	7	9	16
Teaching techniques*	3	1	4
Combative Coping			
Emotion-Focused Coping			
Compartmentalizing	0	2	2
Crashing	1	1	2
Creating a calm environment	3	5	8
Cry*	1	4	5
Don't take it personally*	3	1	4
Seeking support and comfort	6	9	15
Self-talk	1	3	4
Problem-Focused Coping			
Contemplating changing jobs*	0	4	4
Planning*	3	1	4
Powering through*	3	0	3
Seeking Advice *	3	7	10
Voicing Complaints	2	4	6

Note: I calculated the percentage of teachers in each group who endorsed each code. I then compared the two groups. Core ideas with differences between the two groups have an asterisk* if there was a 30% or greater difference between the Resourced group and the Balanced group.

When analyzing the data based on research questions one and two, the coding team found that eight different domains emerged from the data, only four of which pertained to the research questions. In this section, I will review the core ideas within these four domains—*Personal Resources*, *Proactive Coping*, *Combative Coping*, and *Positive School Factors*—along with

representative quotations. Refer to Table 2 for a complete list of core ideas within each of the four domains as well as the number of participants who mentioned each core idea. Two additional domains (*Teaching Demands* and *Negative School Factors*) provided context about teachers' stressful experiences at school in order to inform analyses of how teachers coped. Data from these two domains are included in Table 3 and will be referenced as context, but will not be described as they are not directly related to the research questions. Two domains, *Personal Investment* and *What Schools Can Do Better* came from warm-up or follow-up questions in the protocol, and will not be included, as they did not pertain to the research questions.

Table 3

Demands Domains

Domain, Core Ideas	Resourced Teachers N	Balanced Teachers N	Total N
Teaching Demands			
Classroom management*	2	7	9
Wearing many hats	1	1	2
Parents	1	1	2
Taking work home*	1	4	5
Teacher evaluations	1	1	2
Negative School Factors			
Additional responsibilities	3	6	9
Demands on time	3	6	9
Ineffective administration	4	7	11
Little time away from students*	0	4	4
Low staff morale	1	2	3
Poor relationship with manager	0	2	2
Mandates from administrators	2	4	6

Note: I calculated the percentage of teachers in each group who endorsed each code. I then compared the two groups. Core ideas with differences between the two groups have an asterisk* if there was a 30% or greater difference between the Resourced group and the Balanced group.

Personal Resources

Personal resources included a number of core ideas related to resources teachers mentioned drawing upon in order to prevent and cope with stressful situations at school. The first core idea, *experience*, pertained to half (8) of the teachers. Several teachers stated that previous

experience helped because as Katie said, they spent time "revamping stuff" rather than "generating new ideas." In many cases, it was evident that experience led teachers to appraise their jobs differently, such as Isabel, who stated that "things…that bother some of these young teachers…those aren't really problems. That's just something you need to deal with and move on," rather than a stressor. Sarah's experience impacted her appraisals more holistically, stating that "when you know more and you feel more successful in it, it's not as scary to go in and face it." For many teachers, experience meant 3-5 years. It seemed that for our participants, just a few years in the classroom had a positive impact on their ability to prevent stress.

A large number of participants (13) noted that their particular *mindset*, which usually developed over their time as teachers, helped prevent or cope with stress. Billy stated that he did not let student misbehavior bother him, because he got "into a head space of realizing none of their behaviors has anything to do with me." Learning to appraise challenges in a different way aided him in preventing stress. Other teachers noted that their mindset helped them approach their work as a whole in a different way. Mallory said that, "I'm also much more of a big picture person…That keeps me…from being stressed." While Mallory's approach allowed her to keep larger goals in mind, other teachers described a mindset that allowed for imperfections. Jenny stated that, "[I] forgive myself for not going above and beyond," and she accepted "that perfect can be the enemy of great." Teachers described that their mindset, or the way they approached and appraised their work and school environment, helped them not only to cope, but to thrive.

Nine teachers described different *personal attributes* that benefited their work. George said he "joke[s] around with the kids…it makes me feel [exhales], a little bit more stress-free knowing that these kids are still just kids." George's relaxed attitude allowed him to have fun with his students, while Ashley described being disciplined as important to her wellbeing: "When I'm at work, I'm really focused on what I need to do…I could often socialize…but… when I am there, I am working." Ashley later stated that being disciplined allowed her to take less work home, promoting a better work-life balance. Several teachers stated that being organized helped them immensely, particularly as they were able to save time and find already-

created resources. Participants described these personal attributes as central to who they were as people, which benefited their ability to thrive at school.

The final *Personal Resource* that nearly all teachers (13) mentioned were a mixture of different *outside of school factors* that helped teachers reduce and cope with teaching demands. Many teachers mentioned supportive friends, partners, and families. Veronica said that her husband "helps a lot with the housework" and provided emotional support. Several teachers noted that family helped them recognize when they were stressed, such as Katie's husband, who urged her to spend time with friends. Others teachers stated that they had few demands outside of school, which helped them manage the vocational stress. Tina stated that "I don't have other responsibilities like taking care of my own children." Similarly, Anna said that she had "less on my plate…to mitigate." Isabel stated that as a divorced woman with grown children, she felt independent. The majority of teachers realized that their lives outside of school had an impact on how they were able to prevent stress at school.

Often, the resources mentioned in this domain pertained to comparisons to other teachers. Those teachers who recognized their lack of demands outside of school also recognized that other teachers may be more stressed due to the presence of such demands. Those who were laid-back juxtaposed themselves to teachers who were perfectionistic. These factors, all of which had to do with things intrinsic to the individual or outside of the school, were highly individualized.

Proactive Coping

It was surprising and noteworthy that only three core ideas emerged within the domain of *Proactive Coping*: *healthy habits*, *time management*, and *teaching techniques*. Thirteen teachers mentioned a number *healthy habits*, such as exercise (i.e., running, water aerobics, yoga, walking dogs) or meal planning, helped them maintain a sense of balance. Billy and Anna explained that drinking enough water during the day prevented stress, while Jenny and Mallory noted that getting adequate sleep was important to their wellbeing. Several teachers also described that eating lunch at school prevented them from becoming stressed. Debbie said she slowly realized that "on the days that I feel really stressed at work, it's because I didn't have time to eat," so she

tried to pack and eat a "healthy lunch." The majority of teachers understood that maintaining their physical wellbeing benefited their ability to cope and thrive at work.

All teachers in the study used *time management* skills and techniques at home and school. For several teachers, this meant knowing what tasks to prioritize in a given moment. Debbie stated that prioritizing allowed her to "avoid a Monday panic." Many other teachers said they used their minimal free time at school "wisely" in order to avoid taking home, or, as Mallory put it, "I'm very crafty with my time." Billy, on the other hand, along with other teachers, managed his time by not finishing every task. He stated that, "if it means every paper I take home doesn't get graded that day, it's fine. I got 10 other grades. I can just accept it." For Billy, "letting [some] things slide" at work was in the service of keeping up with family priorities. As a parent, Billy had to "choose specifically…that my kids were the priority." Many teachers also mentioned that they set boundaries with their time, such as Ben who tried "as often as possible…to leave by five," even though he took work home in the evenings. Sarah and Anna, in order to preserve their time, learned to say "no" and create boundaries around additional responsibilities that administrators asked of them. Many teachers also mentioned that they took time for themselves, including carving out vacation days, not working on the weekend, spending time with friends and family, and reading. The abundance of references to time management strategies across interviews illustrates the universality of demands on time among the teachers in this sample, and the centrality of time management techniques in their ability to prevent demands from becoming stressful.

Interestingly, only four teachers mentioned using specific *teaching techniques* in order to cope with classroom stress. Tegan used a technique called "whole brain teaching," which helped engage students using all of their senses when learning a new concept. She said that the technique "activat[ed] all those parts at the same time so there's no room for leeway," meaning that there was little room for student misbehavior because students were fully on-task. Billy said that he "trained my students" to do a particular hand signal when he started to raise his voice. In essence, he taught his students to give him "a silent reminder" to notice his emotions before he

became stressed. Anna used a different technique. As a music teacher, she taught multiple classes, and after each class, she wrote down, "what went well musically…what went well behaviorally…this is what I did that made it go well." This system meant that she did not "have to remember it when I see them a week later—I can look in my book, which helps [with] pre-class stress." It is interesting that teachers who mentioned *teaching techniques* all found strategies to prevent stress from different teaching demands, which speaks to the individualized nature of teachers' appraisals of their classrooms and the approaches they took to thrive.

Combative Coping

Once demands did create a stress response, teachers used a number of strategies in order to cope and to even prevent the demand from occurring in the future. After reading six interviews, it became clear to the team that teachers were using the two categories of combative coping described by Lazarus and Folkman (1984). Thus, we divided the domain into subdomains: *Emotion-focused* and *Problem-focused*.

Emotion-focused coping. Participants used a variety of strategies to cope with the emotions that arose from demands in their school settings. The vast majority (15) of teachers described *seeking support and comfort* when they became stressed. Charlene and Debbie did this by eating comfort foods or drinking caffeine, while many sought out colleagues, administrators, friends, and family to help them process their emotions or "vent." Eight teachers noted that *creating a calm environment* helped. Billy engaged in deep breathing, while Ben took the first ten minutes of his planning period to do "absolutely nothing" in order to "de-stress." Some teachers led students in mindfulness exercises or assigned silent work time to create quiet moments. Five teachers noted that they coped by *crying* either by themselves at school, in conversation with colleagues, or with friends/family later. Four teachers engaged in *self-talk* to calm down or refocus. When Maria became anxious on her morning commute, she reminded herself, "I'm not at work yet…Let's enjoy the moment." Other teachers (4) said that they *don't take it personally* when students acted out in their classes, when parents demonstrated their displeasure, or when colleagues irritated them. Two teachers noted that *compartmentalized* their

feelings until later in the day because being in front of students all day did not leave them time to process. Two teachers mentioned that at the end of a long day at work, they simply *crashed*, which they described as watching television or going to bed very early.

Problem-focused coping. Teachers mentioned five different strategies for *Problem-focused Coping,* aimed at directly alleviating demands. Ten teachers mentioned *seeking advice* on specific job-related demands. They sought this advice from fellow teachers and administrators as well as from friends and family members who were educators. Six teachers mentioned *voicing complaints* to those whom they felt had created stressful situations or could change them. When Ben did not understand aspects of a new curriculum, he told his manager that teachers did not have enough training on the new materials. Four teachers mentioned that *planning* helped them to address demands. Tina and her co-teacher created specific plans for a child with significant behavioral concerns. Three teachers said that they coped by *powering through* temporarily stressful situations. It is interesting to note that four teachers mentioned *contemplating changing jobs* when they felt overwhelmed. Jenny looked for new jobs during a stressful time at work, but stopped looking once the event passed. Debbie and Veronica routinely conversed with their partners about quitting because of the unmanageable workload. All four teachers thought about changing jobs as an agentic way of coping.

Positive School Factors

Teachers were identified for interviews based on appraisals of their classrooms, yet it was clear that other factors in their school building were important to their wellbeing. These *Positive School Factors*, which a majority of teachers mentioned, are described here. Overall, participants mentioned seven *Positive School Factors*.

All 16 teachers mentioned instances of *effective administration*. It is important to note, however, that 11 of the teachers also mentioned moments of *ineffective administration* as a negative school factor (see Table 3). Nonetheless, several teachers mentioned how managers and principals supported their self-care. Jenny reported that her principal encouraged teachers to "Use your days [off]. Those are mental health days." Many teachers also mentioned that once a

month, teachers got the afternoon off. Tina and Ben mentioned that their administrators viewed teacher planning periods as "sacred" time that teachers needed to decompress or complete work. Others talked about being excused from non-teaching duties (e.g., monitoring the student lunch room). Tina's school even paid for a counselor whom teachers could see for free. Teachers all noted that these policies and actions went a long way in helping them prioritize themselves.

As part of effective administration, teachers also mentioned that administrators supported teachers in their work. Katie stated that when faced with a particular challenging classroom management issue, she could "text my administration, and…they can come help." Sarah appreciated that her manager helped her focus on one or two priorities things to improve in each week, and that she benefitted from his classroom observations. Isabel, who had taught for a number of years in traditional public schools, pointed out that her current charter principal "is the first to say we're the experts in the classroom…That's opposite of public school. It's all about…'you do what I say because I am the principal.'" Isabel was amazed by the administrative support, and it was the main reason she continued to teach. It also seemed that as a whole, administrators observed teachers frequently and met regularly to support teachers' instruction.

Related to effective administration is the fact most (12) teachers had a *good relationship with their manager*. Participating teachers were managed by a principal (or school director), dean, or assistant principal. Ashley said that her manager was "laid back…a calming presence…friendly," which made it easy when her manager came in for observations and provided feedback. Isabel, Sarah, and Veronica stated that their particular managers made their jobs less stressful and more enjoyable. Sarah stated that she would "be a lot more frustrated and stressed" if she had a different manager. Veronica, who was managed by an assistant principal, flatly stated that if the principal were her manager, "I probably would have walked out already," because her principal's interactions with her were so negative. Even when teachers did not have a positive relationship with other administrators, having a good relationship with their manager could mitigate stress. The majority of participants felt supported by their managers and felt that their relationship had a positive impact on how they felt about their work and stress level.

Nearly all teachers (15) mentioned that the *positive environment* in their schools influenced how they felt about their jobs. Isabel mentioned that she enjoyed and stayed in her job "because of the environment [the principal has] created. She really brings out the best in everybody." Many teachers mentioned that their relationships with their colleagues, which often continued outside of school, helped school feel like a positive space. Tegan stated that, "it makes it not seem like such a pressure-filled environment when we're able to laugh and joke." Mallory said that her friends at work were a "saving grace" when she experienced negative emotions. Other teachers noted that they appreciated when managers celebrated successes in the classroom, as doing so promoted positivity and collegiality. Overall, teachers in our study were aware that their school environment, primarily the relationships within the school, supported them in coping with the demands of the job and enhanced enjoyment of their work.

Six teachers mentioned that *good professional development* sessions helped them tackle classroom demands or gave them new resources and perspectives. Tina, Katie, and Ben all mentioned trainings that helped them with social and emotional learning and how to respond when students' emotions were heightened. George stated that his administration held trainings on a new curriculum at the teachers' request. A few mentioned sessions that helped them work together as a cohesive staff and get to know one another. Generally, it seemed that professional development related to social-emotional components of teaching, be it student-focused or staff-focused, resonated with teachers as they managed the demands of their work.

While several teachers mentioned holding leadership positions at their schools (e.g. team leader, content team leader, grade level chair), only four teachers described these *leadership opportunities* as positive school or job factors that helped reduce or mitigate stress. As an instructional leader for the art teachers in her district, Katie enjoyed creating plans for her district, a process that had "been interesting to try to come up with ideas that are going to be engaging for my kids…I get to be creative in the planning of my job and learn new things along with them." Similarly, Maria stated that creating the curriculum for her content area helped her "see the power in curriculum," especially when other teachers expressed their "satisfaction" in

the plans she created. The roles these four teachers took on increased their enjoyment or satisfaction in their work, which can be seen as a way of thriving in their jobs.

Lastly, six teachers referred to *lower stress job assignments* that either allowed them to cope with demands more easily or simply involved fewer demands than their colleagues. As an art teacher, Katie saw the same students year after year, whereas classroom teachers work with a new group of children each year. She reported that working with the same students, "gives me more patience with them," which reduced her stress. On the other hand, Sarah viewed her entire job as an interventionist as "inherently less stressful, doing pull-out interventions, than having a whole classroom of kids" because "the demands side has decreased significantly" after she moved into her interventionist role. Billy said that as a social studies teacher, he was allowed more freedom than English and math teachers, who had to use a set curriculum. He described using a strict curriculum as, "one of their sources of stress that I don't have." A minority of participants noted that different aspects of their job assignments led them to have a lower amount of stress than other teachers at their schools.

Discussion

In the discussion section, I will synthesize findings from the first two research questions before providing an analysis of the data related to the third research question. Following, I will discuss limitations and directions for future research.

How Resourced and Balanced Teachers Coped and Thrived

Based on analyses of the interview data, it appears that the transactional model of stress and coping (Lazarus & Folkman, 1984) can provide parsimonious explanations of elementary charter teachers' ability to thrive in demanding professional environments. Previous research on teacher wellbeing and thriving has been heavily influenced by the concept of resilience, but factors promoting resilience were determined to be "idiosyncratic" (Beltman et al., 2011, p. 193), and that the concept of teacher resilience needed to be "refined" (p. 185). The transactional model of stress and coping, however, lends itself to "idiosyncratic" interpretations, as coping is, by nature, a process that is based on individual appraisals of particular contexts or contextual factors. Thus, the strategies teachers use to cope and thrive may be numerous and dependent on context. My study supports such a conclusion in that personal resources and contextual resources can combine in many ways to help teachers thrive.

Teachers in this study engaged in both proactive and combative coping strategies. The combative coping strategies seemed, in essence, to be consistent with previous research in that their strategies fit directly into the framework of strategies that address the specific demand in order to change or mitigate it (problem-focused) and that address the emotional response caused by the demand (emotion-focused; Lazarus & Folkman, 1984). Generally speaking, however, proactive coping has been studied in terms of availability of resources (e.g. Lambert, McCarthy, Gilbert, Sebree, & Steinley-Bumgarner, 2006) or "assets" (Matheny et al., 1986), but not through the delineation of specific proactive coping strategies, as is the case with studies of combative coping. My study, however, clearly demonstrates that elementary charter teachers are using three particular proactive strategies for coping: *time management*, *healthy habits*, and *teaching*

techniques. Though resources can be combined an infinite number of ways, it is significant that my study reached consensus on a small number of proactive coping strategies.

The fact that participants reported only three distinct proactive strategies, in contrast to 12 combative strategies, is noteworthy. Teachers who are at lower risk for stress seem to rely on a few, well-developed, adaptive strategies to prevent stress from occurring. This may indicate that elementary charter teachers face a somewhat limited collections of predictable demands that can be addressed by the small selection of proactive strategies, whereas they are forced to utilize a wider array of combative coping strategies in response to unforeseen demands that arise within their work. It is possible that combative coping may require many different responses depending on the event, but proactive might be less tied to specific circumstances.

It is also possible, however, that each proactive strategy may mitigate the stress of multiple demands. For instance, my study highlights that some of the most potentially demanding situations for teachers involve the sheer amount of active time and work that their schools require of them, and that adaptive *time management* strategies are imperative to curbing and coping with stress stemming from four distinct demands and negative school factors related to teachers' time (i.e., *taking work home*, *little time away from students*, *demands on time*, and *additional responsibilities*; see Table 3). Research has shown that workload can be a source of stress for teachers (Torres, 2014), but workload represents only one time-related demand. In our study, it was not only the number of hours worked that mattered, but also the fact that teachers were not given time during the work day to complete planning, grading, and other work that made their overall workload overwhelming, at times.

While it is important that teachers manage their time well, my study highlights that the centrality of *time management* emerged in response to the unrealistic demands and restrictions on teachers' time in many school contexts. Debbie and Veronica, for instance, mentioned that they were required to spend four of five planning periods a week in meetings, leaving them without work time during the school day. When administrators deprive teachers of sufficient time outside the classroom to work, their ability to cope and thrive becomes increasingly tied to

their use of time management strategies as opposed to their teaching ability and dedication to their students. This conclusion fits with one state education board's findings that teachers wanted between 21 and 24 extra minutes of planning time in each school day (Hixson, Stohr, & Hammer, 2013).

Beyond time management, three core ideas related to school administration stood out as nearly universal factors that helped teachers cope and thrive with demands of the job*: effective administration, good relationship with manager*, and *positive environment*. Previous research has found that teachers' perceptions of school administrators are associated with teacher satisfaction and retention (Boyd, Grossman, Ing, Lankford, & Loeb, 2011; Johnson et al., 2014; Ladd, 2011). This relationship is even more pronounced in high-need, high-poverty schools (Grissom, 2011) like those in which my participants taught. Participants noted administrative factors that helped them prevent and cope with stress, and promote wellbeing. It may be that administrators' impact on stress prevention and wellbeing is an important link between administration and teacher retention and satisfaction. In other words, the ability of the administration to help teachers promote wellbeing may be a precursor to teacher satisfaction and retention.

How Resourced and Balanced Teachers Differed

Regarding research question three, I arrived at two main conclusions about the differences between the Resourced and Balanced teachers with respect how they cope and thrive at school. The first conclusion involves differences between the two groups in terms of the core ideas that they endorsed. The second conclusion addresses the fact that all Resourced teachers seemed to be thriving, while only some of the Balanced teachers seemed to enjoy occupational wellbeing.

Core Idea Differences. There were recognizable differences between the Resourced and Balanced teachers in terms of the core ideas they tended to endorse. In order to depict groups differences in terms of core ideas, I calculated the proportions of Resourced and Balanced teachers who endorsed each code, and determined the difference between those proportions for

each core idea. Differences between the two groups will only be discussed here if the difference was 30% or greater because of the fairly small number of participants (see Table 2).

Resources. *Experience* was the only core idea within the Personal Resources domain that differed between the groups, with a greater percentage of Resourced than Balanced teachers mentioning that experience helped promote their wellbeing. This is a somewhat predictable finding. Previous research has shown that teachers who are in the middle of their careers are in a stage of renewal where they feel "more relaxed, experienced and comfortable about their job and themselves than they had once been, but still enthusiastic and flexible enough to respond to change in a broadly positive way" (Hargreaves, 2005, p. 979).

Within *Positive School Factors*, two key differences emerged. First, a greater percentage of Balanced teachers discussed *leadership opportunities* as factors that helped them prevent and cope with stress, whereas no Resourced teachers mentioned leadership opportunities as vital to their wellbeing. While Balanced teachers enjoyed these opportunities, it is possible that being asked to create curriculum or serve in other leadership positions required extra time and added responsibilities, and that these additional demands may have contributed to their appraisals of their classrooms, which categorized tem in the Balanced group instead of the Resourced group. Previous research has found that when teachers are given leadership opportunities, they remain in their jobs at a higher rate (Ladd, 2011). Thus, even though leadership opportunities require additional work, it seems that they help teachers remain invested in their jobs.

A second difference within *Positive School Factors* involved Resourced teachers' ability to recognize that they had *lower stress job assignments* when compared to their peers, meaning fewer demands in their roles. Teachers who endorsed this core idea pointed to specific aspects of their jobs that reduced their demands, but this act still involved appraising certain aspects as less stressful. What one teacher considered enjoyable, another teacher might find stressful. It is possible that other teachers might have appraised the same job assignments differently.

Coping. Within the domain of *Proactive Coping*, a greater percentage of Resourced teachers noted that they used specific *teaching techniques* to prevent stress. Although all teachers

likely have learned teaching techniques to aid their classroom, Resourced teachers may be better equipped to use such techniques to prevent a stressful event from occurring rather than using the techniques to mitigate stress after the event has occurred.

A number of differences emerged in terms of *Combative Coping*. Within emotion-focused strategies, more Balanced teachers stated that they *cried* to help cope. It is understandable that Balanced teachers may reach the point of crying out of exhaustion and frustration more than Resourced teachers. On the other hand, Resourced teachers said that they *don't take it personally* when they encounter demands. They realized that a demand had induced a stress response, but they mitigated the stress response by reminding themselves that the demand has very little to do with them, a strategy that is adaptive in the moment and can become a mindset to help prevent future demands over time.

Within *problem-focused* strategies, more Resourced teachers mentioned that when dealing with stressful situations, they were able to *power through* and to *plan* in order to reduce the demand. More Balanced teachers stated that they *sought advice* in order to help reduce their demands, which is expected, given that they might not feel able to cope on their own. Four Balanced teachers also mentioned that they coped with their occupational stress by *contemplating changing jobs*. They talked with their partners about the idea, actively searched for jobs, or made the commitment that this would be their last year teaching. It is significant that no Resourced teachers mentioned thinking about changing jobs specifically as a way of coping with the stress of their current job.

Conceptualizing Resourced and Balanced Teachers. The Appraisal Index used in research with the CARD operationalizes a central tenet of transactional theory, namely that stress can result when classroom demands are appraised as exceeding classroom resources (Lambert et al., 2009). The clearest theoretical proposition that can be derived from this classification approach is that teachers classified in the Demands group are most vulnerable to stress, given imbalances in appraised demands vis-a-vis their resources (see Figure 1). Given that Resourced teachers appraise their resources as exceeding demands, a second theoretically derived statement

can be made: these teachers are predicted to be less vulnerable to stress based on transactional theory (Lazarus & Folkman, 1984). Teachers classified in the Balanced group are more challenging to describe theoretically. Using the CARD classification approach, such teachers can neither be said to appraise demands as exceeding resources, nor can it be said their resources exceed demands (thus the name, Balanced). What such a classification means in terms of transactional theory has not been explained.

A review of research using the CARD indicated that the vast majority of CARD studies have found differences between the Demands group and the Resourced/Balanced groups together (McCarthy et al., 2015) on outcomes such as job satisfaction, stress prevention, and burnout. However, fewer studies have found significant differences between the Resourced and Balanced groups (McCarthy et al., 2015). The current research, however, found key differences between the Resourced and Balanced groups that may shed additional light on how to understand teachers classified in both groups from the perspective of transactional theory.

First, it became clear that all Resourced teachers were thriving, which is consistent with transactional theory. Although they mentioned demands that they found stressful in the classroom and school setting, they did not appear to be overwhelmed. Rather, they seemed able to use personal resources and coping strategies in order to meet their occupational demands, in some cases describing quite challenging circumstances without describing feelings of stress.

Resourced teachers were often self-aware of how their appraisals played a role in their ability to thrive. For example, when asked to reflect on her classification as a Resourced teacher, Charlene responded,

> It took some skill to understand, what is it that has to be done and what is it that doesn't have to be done. Because [my principal] will come at you like it all has to be done. And then you kinda have to weave through it like, 'Okay, this has to be done, this doesn't have to be done.'

Charlene did not say that she has fewer demands than other teachers, but she acknowledged that she *appraises* her demands in a different way than some of her peers, by deciding what she can and cannot accomplish. That is not to say, however, that Balanced and Demanded teachers are

responsible, by virtue of their appraisals, for the stress they experience. Sadly, Charlene went on to explain that her particular approach to appraising occupational demands was necessary because the demands themselves were "unreasonable," and that the teachers in her school who believed they had to perfectly accomplish every task set before them were the teachers she identified as most vulnerable to stress.

The experiences of Balanced teachers were mixed. The inconsistent experiences of teachers within the Balanced group was exemplified by three teachers in my study—Maria, Debbie, and Veronica—who seemed overwhelmed by the demands of their jobs. Maria even mentioned that the interview questions were triggering for her, and that thinking about her experiences at school made her anxious. Debbie had previously taught at a charter school in the Northeast where planning time was built into teachers' schedules. In her current school, however, the majority of her planning periods were taken up with meetings. She stated, "I know how I was able to manage my time last year. And I'm trying to do the same things, and it's not working…I don't know how to fix it, and I have no clue what to do." Veronica had already decided that the current school year would be her last, saying that frequently staying at school until seven or eight in the evening was not sustainable for her. Veronica said that she was surprised that she fell into the Balanced group, stating,

> I think I would be in the high stress group because just with all of the paperwork we have to do, it's not so much resources that we need, but it's extra time that we need to plan…It's making everything fit for every student, phone calls for parents after school [trails off]…It's a lot of extra time commitments.

Veronica felt that her school provided her with the physical resources she needed in order to do her job, but not the time to complete her required tasks. Veronica appraised her demands as outweighing her resources because one crucial resource, time, was missing. Maria, Veronica, and Debbie all mentioned multiple proactive and combative coping strategies as well as personal resources, but their resources and coping did not seem adequate for the demands they faced.

It was somewhat surprising that these three teachers in the Balanced group reported feeling so overwhelmed and stressed in their work, although, as previously noted, teachers within

the Balanced group can neither be said to appraise demands as exceeding resources, nor can it be said their resources exceed demands. This means that teachers within the Balanced group may be relatively vulnerable to stress if their demands outweighed their resources, but their Appraisal Index scores still fell within the confidence interval of a score of zero. The three teachers described above had Appraisal Index scores indicating that they slightly appraised higher amounts of classroom resources than demands, despite their reports of high levels of stress. One possible explanation for this disjunction involves time as a resource and a demand. In terms of demands, the CARD asks about time spent on non-teaching duties, which is related to demands on time. However, teachers in the study referred to a suite of time-based demands, some of which did not relate to overall time (e.g., little time away from students). In line with their focus on time-based demands, teachers indicated that additional time for planning, grading, collaborating, eating lunch, or simply sitting quietly to clear their minds were necessary resources that were often withheld. Thus, it seems likely that the absence of time as a demand and a resource on the CARD may explain how those three teachers fell in the Balanced group.

Six of the Balanced teachers, however, seemed to have times in which they thrived and times in which the demands of the job became greater than their capacity to cope. They seemed to be in a group that was coping and thriving on an "average" basis with their job demands. This supports the theoretical claims of that CARD, as those teachers who cannot be said to fit with the Resourced or Demands groups are thought to be Balanced, although researchers have not found as clear results for Balanced teachers as they have for Resourced and Demands teachers (McCarthy et al., 2015). My qualitative findings match this trend, as placing teachers into three groups based on cutoff scores left me with a less clear picture of the middle group. It seems difficult to draw conclusions about this group in particular because they encompass such a wide range of appraisal index scores, and the current research suggests that a continuous variable, (i.e., the Appraisal Index score) be used instead of creating a categorical variable. Alternatively, if creating three groups seems important for the research questions of future studies, it seems that

future research might be directed at defining the Balanced group; better measurement might help identify which teachers in this middle group are clearly thriving.

Conclusions

Delimitations and limitations. First, I chose to limit the study participants to elementary public charter school teachers, chiefly because the CARD was developed for use in elementary contexts (Lambert et al., 2009), and much research with the CARD uses elementary teachers (McCarthy et al., 2015). Thus, the conclusions reached about the study population should not be generalized to secondary public charter school teachers. Second, the CARD was developed using a population of traditional public school teachers (Lambert et al., 2009), and the study participants were public charter school teachers. It is possible that charter teachers have specific demands and resources not accounted for on the CARD. Third, the participants worked in five states in the Southeast and Southwest. I limited the sample geographically because I wanted participants to have similar enough contexts (i.e., states with a similar union presence, etc.), so caution should be taken to not generalize to elementary charter schools nationally.

Limitations of the study include the fact that our study participants could have been more diverse demographically. A small minority of our teachers were male (18.75%), though our percentage of male participants exceeds the percentage of male elementary school teachers across the United States (13%; The World Bank, 2017). Our teachers were, however, much younger than teachers nationally, with an average age of 28.9, whereas the nationally, only 15.3% of teachers are under the age of 30 (National Center for Education Statistics, 2013). While previous studies have noted that charter school teachers are significantly younger than their traditional public school peers (Stuit & Smith, 2012), the experiences of teachers over 30 need to be investigated. Individuals in this age range might have greater family obligations than younger teachers, such as having partners and children and caring for aging parents, that could add to their overall life demands and, consequently, change the way they appraise their work environments. It will be important for future researchers to include older participants as there might be specific demands related to being older than the majority of colleagues.

One additional limitation includes the fact that the interview protocol might not have included enough questions to glean information about teachers' proactive coping strategies, especially given that only four teachers mentioned *teaching techniques* helped them prevent stress. It is highly likely that Resourced and Balanced teachers are using a number of strategies daily that aid both classroom management and instruction and help them prevent stress. Teachers in the study might not have mentioned these because they use them without thinking. Thus, future research should ask specific questions to gather additional information about teaching-specific proactive coping strategies.

Implications for assessing risk using the CARD. Based on results from my study, it seems important that future research takes into account two categories of demands and resources that are currently unaccounted for, both in the CARD and in measures that are typically given in conjunction with the CARD (McCarthy et al., 2015). These demands and resources had a profound impact on teachers' subjective experience of their classrooms. Thus, their CARD Appraisal Index might indicate that they fall in the Balanced group, but their subjective experience makes them feel more like a Demands teacher. The first type of demands and resources that the CARD does not take into account are those that occur completely outside the school setting. For example, Veronica mentioned that school work prevented her from spending quality time with her son in the evenings, and George stated that he lived with a significant other in the previous year, and he was, reportedly, unable to balance his relationship and his work. Alternatively, many teachers mentioned resources outside of school, such as having friends and family that they could rely on for teaching advice and for social support outside of school. It would be impossible to capture all of the demands and resources faced by teachers outside of their work in a measure, but, nonetheless, those demands could have a profound impact on how they are able to handle the demands of their job. Future research could use other measures to examine the relationships between stressors outside of work and Appraisal Index scores.

Second, the CARD does not take into account every demand faced by teachers in their jobs. For the vast majority of the teachers we interviewed, their classrooms/teaching were not the

most challenging aspects of their jobs. Mallory stated that she and her students were "chill…kickin' it," but several situations outside of her classroom influenced her thoughts on wanting to leave her school. A struggling teacher next door constantly demanded Mallory's attention, forcing her to go "reset" this teacher's students several times a day. She also said that her administrators "actively avoided" that teacher's classroom because they were not "proficient" in classroom management themselves. The CARD has one question about the demand of mentoring other teachers, but it has no questions regarding demands caused by (in teachers' eyes) the administrators themselves or even the structure of the school. This could be a major gap when taking into account that 11 teachers mentioned *ineffective administration* as a negative factor related to their schools. Similarly, there are no questions about the demands or the sheer amount of time teachers spend addressing their various demands and responsibilities. Given that three of the demands and negative school factors teachers mentioned related to time, it seems important that the CARD include more items related to time. My study has revealed that classroom instruction and working with students are far from the only sources of demands faced by teachers, and yet, those are the focal demands taken into account by the CARD. More recent research has investigated the link between state context variables (i.e., teacher accountability and evaluations) and teachers' Appraisal Index scores (Lambert et al., in press), but more research needs to be done on the relationship between school context, such as perceptions of administration, and teachers' risk for stress.

Appendices

Note: The appendices contain two different types of information. Appendices A-C include information about the study methods and additional information about participants. Appendix D is much longer and includes the expanded literature review and proposed methods, which were agreed upon by the committee during the dissertation proposal process. There is one additional research question included in the proposed study about teachers' autonomy. While I investigated autonomy during the study, there were not any novel findings related to this research question. Thus, research on autonomy was not included in the manuscript, but is included in the following literature review. I also did not include the CARD measure and the demographic questions again another appendix. Additionally, references for both the manuscript and expanded literature review/proposed methods are included at the end of the document.

Appendix A

Study Measures

The CARD, Elementary Version

Using the scale below, rate how **demanding** your classroom or teaching responsibilities are in these areas.

1 = Not Demanding 2= Occasionally Demanding 3 = Moderately Demanding 4 = Very Demanding 5= Extremely Demanding						
20. Number of children in the classroom.	1	2	3	4	5	NA
21. Children with limited English skills.	1	2	3	4	5	NA
22. Children from diverse cultural backgrounds.	1	2	3	4	5	NA
23. Range of developmental levels.	1	2	3	4	5	NA
24. Number of children performing below grade level.	1	2	3	4	5	NA
25. Children with learning disabilities.	1	2	3	4	5	NA
26. Children with physical disabilities.	1	2	3	4	5	NA
27. Gifted and talented children.	1	2	3	4	5	NA
28. Homeless or transient children.	1	2	3	4	5	NA
29. Children with poor attendance.	1	2	3	4	5	NA
30. Disruptive children.	1	2	3	4	5	NA
31. Children who do not follow directions.	1	2	3	4	5	NA
32. Children with problem behaviors.	1	2	3	4	5	NA
33. Children who require more time and energy than most children.	1	2	3	4	5	NA
34. Paperwork requirements.	1	2	3	4	5	NA
35. Number of program / administrative disruptions to the daily schedule.	1	2	3	4	5	NA
36. Amount of physical classroom space.	1	2	3	4	5	NA
37. Classroom environment conditions (heating, cooling, lighting, etc.).	1	2	3	4	5	NA
38. Availability of instructional resources (supporting materials, teacher guides, etc).	1	2	3	4	5	NA
39. Availability of instructional materials (non-consumable materials; manipulatives, books).	1	2	3	4	5	NA
40. Availability of instructional supplies (consumable materials; pencils, paper, markers, etc.).	1	2	3	4	5	NA
41. Availability of instructional technology (computers, software, printers, scanners, etc.).	1	2	3	4	5	NA
42. Instructional materials and resources that are out dated (not the current editions, etc.).	1	2	3	4	5	NA
43. Time and effort working with protégé teachers (teachers you are mentoring).	1	2	3	4	5	NA
44. Meetings you are required to attend.	1	2	3	4	5	NA
45. Time spent performing non-teaching related duties (monitoring bus, cleaning, etc.).	1	2	3	4	5	NA
46. Parent conferences and contacts.	1	2	3	4	5	NA
47. Formal testing and objective assessments.	1	2	3	4	5	NA
48. Portfolios, performance assessments, or teacher ratings of children's achievement.	1	2	3	4	5	NA
49. Grading student work.	1	2	3	4	5	NA
50. Preparing lessons.	1	2	3	4	5	NA
51. Setting up the classroom for instructional activities.	1	2	3	4	5	NA
52. Preparing classroom materials.	1	2	3	4	5	NA
53. Externally imposed changes to the expectations for your job performance.	1	2	3	4	5	NA
54. Overall how demanding is your classroom?	1	2	3	4	5	NA

Using the scale below, rate how **helpful** each of these resources is with classroom and teaching responsibilities.

1 = Very Unhelpful 2= Unhelpful 3 =Neutral 4= Moderately Helpful 5= Very Helpful						
55. Aides/ assistants.	1	2	3	4	5	NA
56. Parent volunteers in the classroom.	1	2	3	4	5	NA
57. Parent support of school learning activities (field trips, providing materials, etc.).	1	2	3	4	5	NA
58. Parent support of learning activities at home (homework, enrichment activities, etc.).	1	2	3	4	5	NA
59. Adult mentors from the community.	1	2	3	4	5	NA
60. Administrators at your school.	1	2	3	4	5	NA
61. Support personnel for children with learning disabilities.	1	2	3	4	5	NA
62. Support personnel for children with physical disabilities.	1	2	3	4	5	NA
63. Support personnel for gifted or talented children.	1	2	3	4	5	NA
64. Support personnel for children with limited English skills.	1	2	3	4	5	NA
65. Support personnel for children from diverse cultural backgrounds.	1	2	3	4	5	NA
66. Support personnel for children with problem behaviors.	1	2	3	4	5	NA
67. Support personnel for children performing below grade level.	1	2	3	4	5	NA
68. Support personnel for computers and instructional technology.	1	2	3	4	5	NA
69. Counselors or family services workers.	1	2	3	4	5	NA
70. Special area teachers (art, music, PE, etc).	1	2	3	4	5	NA
71. Other teachers (peers).	1	2	3	4	5	NA
72. Mentor teachers.	1	2	3	4	5	NA
73. Staff development opportunities.	1	2	3	4	5	NA
74. Materials for children with learning disabilities.	1	2	3	4	5	NA
75. Materials for children with physical disabilities.	1	2	3	4	5	NA
76. Materials for gifted or talented children.	1	2	3	4	5	NA
77. Materials for children with limited English skills.	1	2	3	4	5	NA
78. Materials for children from diverse cultural backgrounds.	1	2	3	4	5	NA
79. Materials for children with problem behaviors.	1	2	3	4	5	NA
80. Materials for children performing below grade level.	1	2	3	4	5	NA
81. Instructional resources provided by your school or program (supporting materials, teacher guides, etc.).	1	2	3	4	5	NA
82. Instructional materials (non-consumable materials, manipulatives, books).	1	2	3	4	5	NA
83. Instructional supplies provided by your school or program (paper, pencils, markers, etc.).	1	2	3	4	5	NA
84. Overall, how would you rate the resources available to help you with the demands of your classroom?	1	2	3	4	5	NA

Demographic Questionnaire

Are you an elementary charter school teacher in the state of Texas?

How old are you?

What is your gender?

What is your race/ethnicity?

Do you teach in a rural, urban, or suburban charter school?

How many years have you been a teacher?

How many years have you taught at your current school?

Is this the first charter school in which you have taught?

Have you ever taught at a traditional public school?

What grade level and/or subject area do you teach?

Is there a state test for any of the subjects/grades what you teach?

Are you licensed to teach in the state where you are teaching?

- If not, are you working toward licensure?
- If you are certified to teach, how did you become certified?
    - Through an "alternative" program designed to expedite the transition of non-teachers to a teaching career (e.g., a state, district or university alternative program)
    - Through a bachelor's degree granting program (B.A. or B.S.)
    - Through a master's degree granting program (M.A., M.S., M.Ed., M.A.T.)
    - Other - Please specify.
    - I am not certified to teach

If you completed student-teaching, how many months of student teaching did you complete?

- _____ months
- I did not complete student teaching

Were there any formal pre-service classroom teaching experiences that you gained before you became a full-time teacher aside from student teaching?

- I completed one summer of institute training through Teach For America
- I completed one summer of training through another alternative certification program
- Other, please list.
- None

Part of this study will include interviewing a few participants to ask them more in depth questions. Interviews will be between 45 and 90 minutes and can be conducted via Skype or in-person. There will also be a quick second interview that should take 15 minutes. All participants who complete the interviews will be compensated with a $50 Amazon gift card. If you are interested in the possibility of completing a follow-up interview, please list your email address here. If you are selected as a possible interview participant, we will contact you via email within three months from now.

Appendix B

Interview Protocol

Initial Interview:

1. Tell me how you became a teacher.
2. How did you choose to work at your current school?
3. How important is your identity as a teacher to your overall identity?
4. How long do you plan to stay in teaching?
    a. Follow up if necessary: How long will you stay at your current school, in K-12
5. How do you feel about going to work everyday?
6. What about your job makes you excited to come to work?
7. What sustains you in this work?
8. How do you manage or juggle the various responsibilities of being a teacher?
9. What are some ways that you prevent yourself from getting stressed or burned out?
10. How do you maintain work/life balance?
11. Describe one of the most stressful experiences you've had while working at school in the last year.
12. Describe what you did to work through that experience. How did you cope?
13. On a daily basis when you run into stressful situations at school, describe some of the things you might do to cope.
14. Are there relationships with others that help you cope?
15. Do you have skills or abilities that help you prevent or manage stress?
16. Are there any specific things administrators do or policies that your school has that help you prevent or manage stress?
17. Does your administration ever explicitly address teacher stress and ways of helping teachers cope or prevent stress? If so, how?

18. Do you feel like you handle stress better than the average teacher at your school? If so, how?

19. How free do you feel to make decisions about your own classroom, such as decisions about curriculum, lesson plans, and student discipline issues?

20. How much are you a part of school-wide decisions, such as the hiring of new teachers or setting up school-wide behavior management policies?

21. How does your inclusion in decision-making within the school and classroom have an impact on your work and your stress level?

22. Tell me about your relationship with your direct manager.

23. Does your relationship with your manager have an impact on how you feel about your work and your stress level?

24. Tell me about your relationships with your coworkers.

25. Do these relationships have an impact on how you feel about your work and your stress level?

26. Is there anything else that I did not ask, but that you think is relevant to this study that you would like to tell me?

Follow-up Interview:

1. Tell me about your experience with the interview.

2. What could your school do differently or do better in order to help teachers thrive?

3. [Explain weighing of resources and demands.] Based on that measure, we can split people into one of three groups, Resourced, Balanced, or Demands. Based on your answers to the survey, you fell in the _____ group. Does that align with your experience and make sense that you fell in that group?

Appendix C

Additional Participant Information to be Included in Manuscript

Table C1

Demographic Information for all 35 participants who took the CARD

Appraisal Group	N	Age	Mean, Years of Experience	Mean, Years at School	Mean, Demands T Score	Mean, Resources T Score	Appraisal Index
Demands	5	31.8	8.8	3	57.51	41.990	15.52
Balanced	18	25.72	3.22	2.56	50.73	51.45	-0.80
Resourced	12	31.58	5.42	2.17	42.91	58.77	-15.86

Table C2

Extended Demographic Information from Interview Participants

Pseudonym	Age	Gender	Race/Ethnicity	Years at Current school/ Total years teaching	Appraisal Group	Grade/ Subject	Location	Ethnic/ Racial Minority	Free/ reduced lunch	Licensed	Licensure Method	Months of Student Teaching	Other Training Experiences
Ashley	27	Female	White	1/3	Resourced	3/self-contained	urban	99%	93%	yes	Bachelor's	9	None
Billy	40	Male	White	1/3	Resourced	4/social studies	urban	99	99	yes	Alternative	10	Alternative Programming
Isabel	60	Female	Hispanic	2/30	Resourced	1/self-contained	urban	85	90	yes	Master's	6	None
Tina	25	Female	Asian	2/2	Resourced	K/math, literacy	urban	97%	90%	yes	Bachelor's	6	None
Anna	23	Female	White	1/1	Resourced	1-4/music high school/choir	rural	95% +	95% +	yes	Alternative	0	Teach For America
Sarah	26	Female	White	5/5	Resourced	1-4/reading interventions	rural	90+%	92%	yes	Bachelor's	3	None
Charlene	32	Female	African American	2/2	Resourced	1/self-contained	urban	95%	99%	working toward	Alternative	0	None
Tegan	23	Female	White	1/1	Balanced	1/self-contained	urban	95%	95%	yes	Alternative	0	Teach For America
George	23	Male	Hispanic	2/2	Balanced	1/self-contained	urban	90%	Unsure	working toward	N/A	0	None
Mallory	26	Female	African American	2/4	Balanced	3/math	urban	99%	95%	unsure	Alternative	1	Teach For America
Ben	23	Male	Jewish, White	2/2	Balanced	1/self-contained	urban	90	90	yes	Bachelor's	24	None
Maria	25	Female	Latina	4/4	Balanced	1/self-contained	urban	100%	100%	yes	Alternative	1	Teach For America
Katie	25	Female	White	4/4	Balanced	K-5/art	urban	100	95	yes	Alternative	3	Alternative Programming
Jenny	24	Female	White	3/3	Balanced	1, 3-5/reading intervention	urban	99	90	yes	Bachelor's	1	Teach For America
Debbie	25	Female	Multiracial	1/4	Balanced	3/math	urban	99%	At least 80%	licensed in another state	Alternative	3	Alternative Programming
Veronica	24	Female	Hispanic	1/4	Balanced	4/math	urban	90	60	yes	Alternative	0	Teach For America

Appendix D

Extended Literature Review and Proposed Methodology

Teacher stress is a well-documented phenomenon: it has been examined for many years (Kyriacou & Sutcliffe, 1977; Sutton, Mudrey-Camino, & Knight, 2009). Teaching is also acknowledged as a highly demanding profession (Bertoch, Nielsen, Curley, & Borg, 1989). The MetLife Survey of the American Teacher in 2012 found that a majority of teachers indicated that they experienced "great stress at least several days a week," which was a significant increase since the last time stress was measured in this way in 1985 (Markow & Pieters, 2012). The American Federation of Teachers conducted a survey of 30,000 teachers in the United States and found that 70% often found their jobs to be stressful (Layton, 2015).

Early researchers defined teacher stress as a "a response by a teacher of negative affect …as a result of the demands made upon the teacher in his role as a teacher," including, "the degree to which the teacher perceives that he is unable to meet the demands made upon him" (Kyriacou & Sutcliffe, 1977, p. 299). In other words, a teacher's perception of her ability to meet the demands of her work environment is essential to understanding the stress response. The later transactional model of stress (Lazarus & Folkman, 1984) is consistent with Kyriacou and Sutcliffe's (1977) definition. The transactional model states that stress is the result of an individual's appraisal (perception) that his life demands exceed the amount of resources he has (Lazarus & Folkman, 1984). When applying this model to teachers, it is suggested that teachers whose classroom resources for coping are inadequate to meet their classroom demands are those most at risk for stress (Lambert, McCarthy, O'Donnell, & Wang, 2009). There is an important distinction between risk for stress and the stress response. Risk for stress is the result of an imbalance between resources and demands, but an actual stress response is the emotional, cognitive, and physical symptoms of stress, including increased cortisol levels and activation of the sympathetic nervous system (Persson & Zakrisson, 2016). The stress response is, thus, a temporary state of physical, emotional, and cognitive responses. Investigating teachers' risk for stress allows researchers to examine teachers' longer-term vulnerability to stress, rather than

their in-the-moment responses, and this vulnerability has been associated with lower levels of occupational health (McCarthy, Lambert, Lineback, Fitchett, & Baddouh, 2015). The proposed study uses the concept of risk for stress in order to identify and investigate the experiences of teachers who have a lower risk for stress.

McCarthy, Lambert, and colleagues have developed a measure to operationalize the transactional model of stress for the teaching profession called the Classroom Appraisal of Resources and Demands (CARD, Lambert et al., 2009). The CARD measures teachers' perceptions of their classroom demands and their classroom resources, which allows researchers to examine teachers' risk for occupational stress. The CARD classifies teachers into three groups based on their responses to the Resources and Demands section of the CARD: (1) the Resourced group (resources greater than demands), (2) the Balanced group (resources and demands fairly equal), and (3) the Demands group (demands exceeding resources). According to the transactional model of stress, the Demands group is hypothesized to be at the greatest risk for stress (Lambert et al., 2009). Using a national sample, 25% of teachers were in the Demands group and 75% of teachers were considered to have a lower risk for stress by perceiving their resources as equal to or greater than their demands (Lambert, McCarthy, Fitchett, Lineback, and Reiser, 2015).

Growing evidence suggests teacher stress has negative consequences for the profession. Stress is associated with lower intentions to remain in teaching (Klassen & Chiu, 2011), higher teacher attrition (McCarthy, Lineback, Boyle, Fitchett, & Lambert, 2016), and lower job satisfaction (Miller & Travers, 2005). While earlier research found that one-third of teachers left the profession within their first five years on the job (National Commission on Teaching and America's Future, 2009), more recent research has demonstrated that the trend might be slowing; in a recent study completed by the National Center for Educational Statistics (Gray & Taie, 2015) only 17% of teachers who began teaching in the 2007-08 school year left in their five first years. Using nationally representative data, McCarthy et al. (2016) found that teachers who are at risk for stress in their first year are about half as likely to remain in teaching by their fifth year.

Teacher stress and attrition research has mainly investigated the what is going wrong for teachers that causes many to quit their jobs (Howard & Johnson, 2004).

A newer line of research, inspired by the positive psychology movement and subsequent shift in research, has examined resilience and what is going well for some teachers rather than only studying negative outcomes (Howard & Johnson, 2004). These researchers argue that studying how teachers manage to (and how their schools help them) thrive will help researchers, administrators, and teachers learn to replicate and develop the conditions to help teachers remain in the classroom (Howard & Johnson, 2004). Research has found that, much like stress, teacher resilience is a process—an interaction between individuals and their environment—and both individuals and the environment can help build resilience (Beltman, Mansfield, & Price, 2011). Reviews of resilience research have uncovered a large range of factors that build resilience, which will be reviewed in detail in the literature review (Beltman et al., 2011; Greenfield, 2015). Understanding management and coping strategies of teachers who are at low risk for stress provides important insight on what has been demonstrated to be a challenging and demanding profession (Schaufeli & Enzmann, 1998). Investigating how these teachers are thriving, and, consequently, staying in the classroom is vital: this research informs how to intervene with teachers who are at higher risk for stress.

Current research on teacher resilience has been conducted mainly in Australia, China, and in the United States (Beltman et al., 2011; Cheung, Tang, & Tang, 2011). Studies in the U.S. have examined resilience in traditional public school teachers rather than charter school teachers. Because charter schools have more decision-making power free from state control (while still being public schools) than traditional public schools (Charter School Enrollment, 2015), studying teachers in these unique environments is warranted. Studying what contributes to charter school teachers' ability to thrive could have a great impact on helping to prevent teachers from being at risk for stress and on keeping healthy and happy teachers in the classroom. Currently, charter school teachers are exiting the field at rates approximately twice as high as traditional public school teachers (Sass, Flores, Claeys, & Pérez, 2012; Stuit & Smith, 2011),

even though they tend to have higher satisfaction with their jobs than traditional public school teachers (Renzulli, Parrott, & Beattie, 2011). Given that the number of charter schools and subsequent number of charter school-enrolled students continue to rise (Kahlenberg & Potter, 2015), understanding teachers' ability to thrive and to continue teaching is vital for our nation's charter schools. Currently, the research on charter school teachers routinely focuses on workload (Malloy and Wohlstetter, 2003) and attrition (Miron & Applegate, 2007) rather than on teacher wellbeing.

The proposed study seeks to fill this gap in the literature by investigating the experiences of charter school teachers who have lower levels of risk for stress with the following research questions:

1. How do Resourced and Balanced elementary charter school teachers describe what allows them to thrive?
2. What types of coping strategies and resources are these teachers using?
3. What role, if any, does teachers' autonomy play in these teachers' ability to thrive?
4. In what ways do Resourced and Balanced teachers differ from each other with respect to research questions one and two?

The study proposes to explore the experience of stress and coping for teachers who are, based on the CARD, in the Resourced or Balanced groups and, thus, at lower risk for stress. The study uses a quantitative measure in order to select interview participants, which is the main focus of the study and will employ qualitative methodologies. I will recruit approximately 30-50 elementary charter school teachers to take the quantitative measure of teacher stress, the CARD (Lambert, et al., 2009), using an online questionnaire. Analyses from the CARD will allow us to place teachers into the three groups: Resourced, Balanced, and Demands (Lambert et al., 2009). Teachers who fall into Resourced and Balanced groups the will be invited to participate in semi-structured interviews, which will examine the research questions using qualitative methods. Eight to 15 participants will be needed for involvement in the two-part interview process: an initial 45-90 minute semi-structured interview and a 15-30 minute follow-up interview to clarify

or expand on any points from the initial interview. Interviews will be transcribed and analyzed according to the guidelines of Consensual Qualitative Research (CQR; Hill, Thompson, & Williams, 1997). CQR uses an analysis team approach to analyzing data, whereby members code data individually and then meet to arrive at consensus on the codes that represent the data.

Review of the Literature

Teacher Stress and Occupational Health Outcomes

I will first review the negative outcomes associated with teacher stress as a background for understanding why researchers need to help teachers and schools develop the ability to thrive rather than simply survive or worse, even quit teaching. Teacher stress is hypothesized to have a negative causal effect on occupational health outcomes, though much of the research is correlational and direct causation cannot be determined (McCarthy, Lambert, Crowe, & McCarthy, 2010). Stress is, therefore, seen as a precursor to these negative consequences for teachers. The following sections will detail various aspects of teacher occupational health that are negatively associated with teacher stress. Occupational health was initially defined as simply the physical safety of workers, but has, in more recent years, come to include "the enhancement of the physical, mental and social well-being of workers and support for the development and maintenance of their working capacity, as well as professional and social development at work" (World Health Organization, 2001, p. 13). The two occupational health outcomes reviewed here are job satisfaction and retention/occupational commitment, which are frequently studied in relation to teacher stress (McCarthy et al., in press).

Job satisfaction. A recent survey of American teachers noted that teachers' satisfaction with their jobs is at its lowest level in 25 years, with 39% of teachers responding that they were very satisfied (Markow & Pieters, 2012). Job satisfaction has historically been investigated by industrial organizational psychologists (Locke, 1976), as it has important implications for both employers and employees (Taleb, 2013). An early researcher described it as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1300). Job satisfaction is, thus, the result of an individual's appraisal of her work

environment and her experiences in her role. In research with teachers, job satisfaction is defined in two ways: as overall satisfaction (Ironson, Smith, Brannick, Gibson, & Paul, 1989; Markow & Pieters, 2012) and as satisfaction with different parts of a job (Skaalvik & Skaalvik, 2011).

Researchers investigating teacher stress and job satisfaction in both the United States and internationally have regularly found a negative relationship between the two variables (or a positive relationship between stress and dissatisfaction). In research with the CARD, results across multiple studies have found that teachers who are in the Resourced and Balanced groups are less likely to report job dissatisfaction than teachers in the Demands groups (Fisher, 2011; McCarthy, Lambert, & Reiser, 2014; Lambert, McCarthy, Crowe, McCarthy, & Fisher, 2012). Studies in Spain (López, Bolaño, Mariño, & Pol, 2010), Canada (Klassen, Foster, Rajani, & Bowman, 2009), the Dominican Republic (Gilbert, Adesope, & Schroeder, 2014), and the United Kingdom (Miller & Travers, 2005) have also found the positive association between teacher stress and job dissatisfaction. Researchers in Ireland examined the relationship between stress and a number of different variables, including stress, self-efficacy, self-esteem, age, highest level of education, and teaching experience (Reilly, Dhingra, & Boduszek, 2014). The authors found that stress was the only variable with a unique prediction of job satisfaction among all of the variables tested (Reilly et al., 2014). Again, although most of these studies are correlational, it is hypothesized that teachers' job satisfaction suffers when they experience occupational stress. Thus, it is important to understand how teachers who are in challenging environments manage to be at lower levels of risk for stress.

Occupational commitment and teacher turnover. The ultimate goal of investigating teachers' job satisfaction and stress levels is to understand how we can retain happy, healthy, and productive teachers in order to have the greatest impact on students' learning. Because of this, researchers have investigated teacher turnover for a number of years, but especially since Ingersoll (2001) first argued that a "revolving door" of new teachers entering and quickly exiting the profession was at the root of the U.S. teacher shortage.

Researchers investigate teachers staying in the classroom using three different, but related constructs. The constructs of occupational commitment, intentions to leave teaching or remain in teaching, and attrition/retention are all related, but they are all distinctly separate (Gilbert et al., 2014). Teacher attrition and retention are measured simply by determining whether teachers remain in the profession from year to year (Ingersoll, 2001). Jepson & Forrest (2006) defined occupational commitment for teachers as "dedication and loyalty to the teaching profession" (p. 188). Intentions to leave or remain in teaching is defined as actions taken to leave the profession (McCarthy et al., 2010), a teacher's likelihood to remain in teaching, or how long the teacher reports she intends stay in the profession (Hancock & Scherff, 2010).

Much of the research on teacher turnover in the United States uses data from the Schools and Staffing Survey (SASS) a large, nationally representative, and comprehensive database on teachers in the United States run by the National Center for Education Statistics and is the largest database on U.S. teachers (Ingersoll & Smith, 2003). Using SASS data from the late 1990s and early 2000s, Ingersoll (2001) estimated that between 40 and 50% of teachers left within their first five years, and he noted that attrition of teachers is higher than many other professions, including pharmacists, nurses, and attorneys (Ingersoll, 2012). The most current data from the National Center for Education Statistics have found that 17% of teachers quit teaching within the first five years, and an additional 10% had left their original school, but remained in teaching (Gray & Taie, 2015). Those statistics are drawn from the National Center for Education Statistics, which conducted the Beginning Teacher Longitudinal Study (BTLS). BTLS followed teachers who began teaching (and responded to the SASS) in 2007-08 through their first five years (Gray & Taie, 2015). While this suggests a bright spot in research on teacher retention, it is important to note that data analyzed were from 2007-2013, a time when the United States experienced a large recession, and individuals who had stable jobs may have been more reluctant to leave (McCarthy et al., in press).

The high attrition rate of teachers has created a workforce of teachers who fail to mature in their roles (Ingersoll, 2012) and leave the profession as they only begin to master the skills and

gain the confidence necessary to be effective teachers. Some teacher turnover can be positive: it is important to remove ineffective teachers from the classroom while retaining effective teachers (Béteille & Loeb, 2009; Jacob, Vidyarthi, & Carroll, 2012). The high rates of attrition that some schools and districts experience, however, can be detrimental to the schools as organizations and to the students they serve. Recruiting, training, and supporting new teachers is an expensive endeavor (Ingersoll & Smith, 2003) and high levels of turnover can lead to detrimental academic outcomes for students (Guin, 2004; Rondfelt, Loeb, & Wyckoff, 2013). High turnover has been associated with decreases in students' English/ language arts and math scores (Guin, 2004; Ronfeldt et al., 2013). Ingersoll and colleagues have determined that teacher turnover is greater in schools with high percentages of low-income and minority students than in schools with lower percentages of such students (Ingersoll, 2001). In a disturbing trend in recent years, Ingersoll and Merrill (2012) noted that teachers in such schools quit teaching or left their schools 41% more often in 2008 than in 1998.

After examining attrition rates across the country, I will now review research investigating the relationship between teacher stress and teacher attrition/retention. Research with the CARD using local samples of teachers has found that teachers in the Demands group report are more likely to leave the profession within the next year than those in Resourced and Balanced groups (Lambert, McCarthy, Fitchett, Lineback, & Reiser, 2015) and report making more plans to leave the profession (Lambert, McCarthy, Crowe, McCarthy, & Fisher, 2012). Lambert et al. (2015) took items from the SASS and created a measure similar to the CARD. Using these data, the authors found that their results could be replicated nationally: teachers in the Demands group were less likely to report that they would become a teacher again and less likely to report that they would return to the profession in the following academic year (Lambert et al., 2015). Longitudinal data using the CARD and BTLS data have fit this pattern of results. Teachers who were in the Demands group in their first year on the job were much less likely to have remained in teaching over the course of their first five years in the classroom than teachers in Resourced/Balanced groups (66.5% versus 82.2%, respectively; McCarthy, Lineback, Boyle,

Fitchett, & Lambert, 2016). Using this research, one can infer that a teacher's risk for stress in their first year is an important indicator of their longevity in teaching.

Additional research has also found relationships between teacher stress and either occupational commitment or intentions of leaving the profession. Studies from both Canada (Klassen & Chiu, 2011) and the Dominican Republic (Gilbert et al., 2014) found that occupational commitment was negatively associated with teacher stress and intentions to leave teaching was positively correlated with teacher stress. A study of teachers in the United Kingdom found that among a number of variables, occupational commitment was the strongest factor in teachers' perceived stress (Jepson & Forrest, 2006).

In summary, the most recent research has found that teachers are leaving at less alarming rates than originally thought, although the economic recession may have played a role in recent attrition rates. However, the level of attrition is still high, when compared to attrition in some other countries. For example, 93% or more of beginning teachers in Japan, South Korea, Germany, Finland and Taiwan remain in teaching (Wang & Fwu, 2014). The data reviewed above demonstrate that there are positive occupational health outcomes for teachers who are at lower risk for stress, such as higher satisfaction rates and retention, but many times, the research stops there, with correlations. Research on the autonomy teachers are given demonstrates that it might serve as a protective factor in preventing teacher stress.

Working Conditions: Autonomy

Research on professional autonomy has determined that those with greater autonomy feel freer to do their jobs without a large amount of oversight and have greater control over the decisions that they make about their work (Smylie, 1999). Research exploring the relationship between stress and autonomy has mainly been quantitative in nature. It seems important to understand how teachers in the Resourced and Balanced groups describe their work environments, in their own words, and to determine how autonomy might play a role in their ability to thrive. Definitions of autonomy in teaching include the freedom to have decision-making power about their methods of teaching and assessing students, about school-wide

policies and administrators, and routine decisions that occur in their work environments (Friedman, 1999; Pearson & Hall, 1993). Research on teacher autonomy can be separated into two categories: classroom control, defined as teachers' perception that they have the freedom to choose their instructional pedagogy, and school influence, defined as teachers' perception that they have an impact on policies within their school (Jackson, 2012; Lambert et al., 2015; Pearson & Hall, 1993).

Research detailed below has found that teachers who have greater autonomy in their professional roles are more likely to stay in the classroom than those with less autonomy in their roles (Jackson, 2012; Liu, 2007). While this research is mainly correlational, it can be inferred from the research presented below that increasing teacher autonomy could be one way of supporting teachers and helping them remain in the classroom. Teacher autonomy is hypothesized to be a precursor to low stress levels (McCarthy et al., in press).

Research on teacher autonomy has typically found that when teachers have higher levels of autonomy (studied as a single construct or as the two categories mentioned above), they are likely to have better occupational health outcomes. Researchers have found positive associations with teacher autonomy and job satisfaction (Lam & Yan, 2011; Pearson, 1998) and negative associations with autonomy and burnout (Jiang, 2005). Greater levels of school influence have been associated with higher retention (Jackson, 2012) and increased intentions to remain in teaching (Sedivy-Benton, Boden, & McGill, 2012). Classroom control has likewise been associated with higher intentions of remaining in the profession (Sedivy-Benton et al., 2012).

Studies exploring teacher stress and autonomy have found relationships in the expected direction. Lower levels of autonomy have been associated with a higher risk for occupational stress (Smylie, 1999). Research by Pearson and Moomaw (2005) demonstrated that teachers' job stress decreased as both their school influence and classroom control increased. Results from a CARD study using SASS data indicated that teachers in the Demands group had significantly lower scores on both school influence and classroom control when compared to teachers with teachers in the Resourced and Balanced groups (Lambert et al., 2015).

Research internationally demonstrates that levels of autonomy afforded teachers are dwindling: this trend has been found in England (Whitty & Wisby, 2006), Sweden (Wermke & Höstfält, 2014), and China (Robertson & Jones, 2013). Given the clear results indicating that teachers have more positive occupational health outcomes when they are given more autonomy in their roles, the trend in reducing their professional control is a disturbing one. The literature review will now describe the different models of teacher stress and the model that will be used in the proposed study.

Theoretical Models of Teacher Stress

Even before No Child Left Behind legislation that brought in an age of high-stakes testing and accountability reforms, researchers investigated the phenomenon of teacher stress (Brouwers & Tomic, 2000; Eskridge & Coker, 1985, Kyriacou & Sutcliffe, 1977). With the rise in accountability standards, which tie teacher performance to their students' performance on state or national tests, the demands that teachers encounter in their jobs has risen (Lambert et al., 2012), while the prestige of the profession, the salary of teachers, and the resources they need to do their jobs well have not risen at the same rate (Goldstein, 2014).

This section will first outline simpler definitions of teacher stress, which tend to view stress in the teaching profession as different stressors that teachers encounter. I will then explain and describe in detail the view of teacher stress using two different balance models of stress, which state that an imbalance in resources and demands results in a stress response (Meurs & Perrewé, 2011). The balance models reviewed will be the transactional model of stress and coping (Lazarus & Folkman, 1984) and conservation of resources (COR; Hobfoll, 1989). For the proposed study, I am using the transactional model of stress to identify teachers who are at lower risk for stress with the hope to interview them about their experiences. I also acknowledge that the COR model could be helpful in terms understanding what allows teachers to thrive in challenging environments once I begin interviewing teachers. The reasons it might be helpful are more clearly explained in the section on COR.

Traditional methods of examining teacher stress. Some research on teacher stress has studied how stress is associated with different aspects of teachers' jobs (usually by asking teachers what parts of their jobs are stressful) rather than giving a clear definition of what teacher stress actually is. Researchers have found that student misbehavior is one of the most demanding and stressful parts of the job (Chang, 2009; Eskridge & Coker, 1985; Sutton et al., 2009), and past research has linked teacher stress to student misbehavior (Friedman, 2006; Lambert, Kusherman, O'Donnell, & McCarthy, 2006). Specifically, there are certain types of classroom incidents that are consistently associated with teacher stress. Students talking out of turn, students being idle or slow, and students hindering other students were found to be the three student behaviors (out of a total 12 tested) that had the greatest contribution to teachers' stress levels (Clunies-Ross, Little, and Kienhuis, 2008). It is noteworthy that these behaviors were not major, such as physical aggression; they were relatively minor issues. Thus, it seems that minor misbehaviors, when occurring frequently, seem to be associated with higher levels of teacher stress. Other studies have found that students' disrespectful behaviors were the behaviors cited most often as stressful for teachers (Friedman, 1995; Lopez et al., 2008). Still other research has found other aspects of teaching to be especially stressful, including workload, demands on time, and organizational factors (Blase, 1986; Boyle, Borg, Falzon, & Baglioni, 1995).

The teacher stress literature also includes research defining teacher stress in other ways. Some research has operationalized stress as symptoms of stress, such as chronic fatigue, post-traumatic stress symptoms, and reduced sleep quality (Garrick et al., 2014). Another, earlier measure of teacher stress defined teacher stress as the presence of five different types of stressors (e.g. time management) as plus five symptoms of stress (e.g. fatigue; Fimian, 1984).

The models of teacher stress mentioned above include important information. Understanding the working conditions and specific stressors for teachers help us understand what aspects of teachers' jobs are particularly stressful. Looking at symptoms of stress indicates how stress manifests in teachers once they become stressed. Objective measures of the presence of stressors or symptoms of stress, however, do not help us understand how a teacher in one

classroom manages to thrive while the teacher in the classroom next door is depleted by the very same working conditions (Chang, 2009). Teachers' perceptions of their working environment can help us understand how there can be such variations in teachers' levels of stress, even in the same school environment.

Balance models of stress. Within the stress literature, there are two different balance models of stress that are helpful when investigating teachers' thriving and coping, conservation of resources (Hobfoll, 1989) and the transactional model (Lazarus & Folkman, 1984). Again, balance models state that individuals experience a stress response when they have an imbalance of resources and demands (Meurs & Perrewé, 2011). Both models are well-researched and frequently cited in the stress literature (Hobfoll, Schwarzer, & Chon, 1998). I will first give a brief introduction to balance models, then review the transactional model and conservation of resources model in detail.

Coping resources are essential in order to cope successfully in any of the balance models. Coping resources are defined as the various assets an individual has to meet the demands of life (Matheny, Aycock, Curlette, & Juncker, 1993). When adequate coping resources are present, life demands do not cause a stress response—rather, these demands are seen as a challenge. However, when resources are inadequate to meet life demands, individuals are at a greater risk for experiencing stress.

The transactional model of stress describes stress as the result of a complex interaction between an individual and her environment (Meurs & Perrewé, 2011). Investigating teachers' perceptions of their environment allows for a more nuanced understanding of risk for stress and helps us understand how two teachers at the same school can have very different reactions to similar environments. The transactional model of stress emphasizes individuals' perceptions as crucial to the stress process and is the most-often cited and commonly accepted approach in understanding stress (Hobfoll et al., 1998).

The transactional model of stress posits that individuals become stressed when they perceive that they are unable to cope with the demands they encounter (Lazarus & Folkman,

1984). Thus, the stress process for teachers involves a teacher's perception (appraisal) of job-related demands vis-a-vis job-related resources, and this appraisal process is a cognitive evaluation that occurs when demands are encountered (Lazarus, 2001). According to the transactional model, when an individual encounters a potentially stressful event (called a demand), a two-step appraisal process takes place, depicted in Figure D1, below (First, the individual must decide whether the demand is relevant to her life and congruent with her current goals. This process is called the primary appraisal (Lazarus & Folkman, 1984). If the individual appraises the event as relevant and potentially harmful, the individual will then move toward the secondary appraisal (Lazarus & Folkman, 1984). Events that are appraised as irrelevant or not harmful to one's goals do not cause the individual to go through a secondary appraisal.

During the secondary appraisal, the individual weighs resources, as seen in Figure D1, and decides whether she has enough appropriate resources to cope with the demand. When resources are seen as able to meet the demand or there is a surplus of resources, the individual perceives the demand as a challenge and will not likely experience a stress response. Instead, the individual will likely function optimally, as seen on the left side of Figure D1. On the other hand, when resources are seen as inadequate to cope with the demand, the individual will likely have a stress response (Lazarus & Folkman, 1984), as seen on the right side of Figure D1.

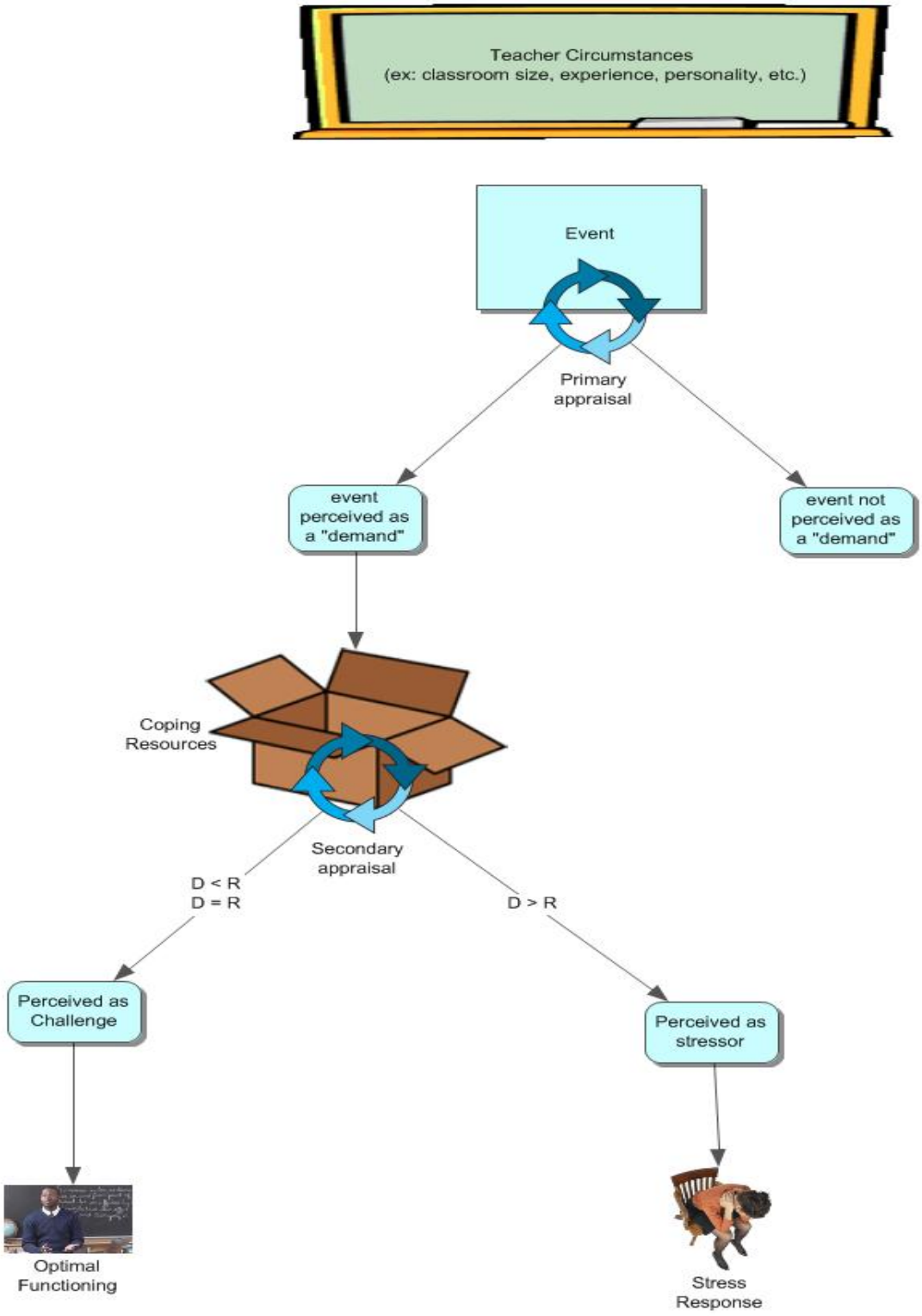

Figure D1: Transactional Model of Teacher Stress (McCarthy, Lineback, & Reiser, 2014)

Operationalizing and testing the transactional model is inherently challenging, as described by Hobfoll (1989): "To test the model, the units of coping resources must be compared to the units of demands for balance or imbalance to be judged. No attempt has been made to develop such a system of equivalent units, no doubt because it would be an extremely difficult task" (p. 515). The Classroom Appraisal of Resources and Demands (the CARD) was developed with this exact task in mind (Lambert et al., 2009).

The CARD was developed to measure teachers' perceptions of both their classroom demands and their classroom resources, and the assessment of these two aspects of their classroom environment would allow researchers to assess teachers' risk for experiencing occupational stress (Lambert et al., 2009). The CARD classifies teachers into three groups based on their responses to the Resources and Demands section of the CARD, as noted above: (1) the Resourced group (Resources >Demands), (2) the Balanced group (Resources=Demands), and (3) the Demands group (Resources<Demands). According to the transactional model of stress, the Demands group is hypothesized to be at the greatest risk for stress. Findings from studies using the CARD have consistently supported the transactional model: the greatest amount of variance in teachers' CARD results has been between individual teachers rather than between teachers at different schools (McCarthy et al., 2015), which supports the transactional model: individual perceptions, rather than external factors alone, seem to determine teachers' vulnerability to stress (O'Donnell, Lambert, & McCarthy, 2008).

After the appraisal process determines that demands exceed resources and thus, a stress response has occurred, a separate, but related, coping process takes place. Securing and developing adequate resources is vital to successful coping efforts (Wheaton, 1983). Specific coping strategies are the ways in which individuals use resources to combat their demands (Lazarus & Folkman, 1984). Combative coping, or coping that occurs after an event has been appraised as stressful, involves using available resources to develop both cognitive and behavioral strategies to meet the demand (Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen, 1986) and is illustrated in Figure D2 below. Within combative coping, Lazarus and

Folkman (1984) delineate two categories of coping strategies: emotion-focused and problem-focused. When using problem-focused coping, an individual tackles the demand/perceived stressor directly, as seen in Figure D2. When employing emotion-focused coping, an individual attends to the emotional response that the demand triggers, also seen in Figure D2. For example, if a child is disrupting class by distracting students around him, a teacher using emotion-focused coping might try to reduce his frustration by counting to ten before responding and a teacher using problem-focused coping might directly address the misbehavior with the student (McCarthy, Lineback, & Reiser, 2014). Within both problem-focused and emotion-focused coping, there are a number of different strategies that individuals can use in order to manage their stress (Matheny, Aycock, Pugh, Curlette, & Canella, 1986).

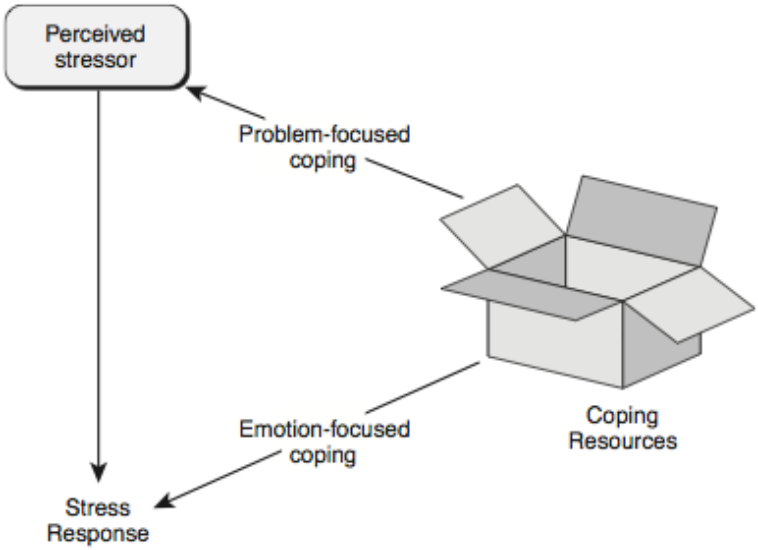

Figure D2. Illustration of the Combative Coping Process (McCarthy, Lineback, & Reiser, 2014)

There is also a type of coping, called proactive coping, that individuals engage in before they encounter demands. Proactive coping was defined by Aspinwall & Taylor (1997) as "any behavior in advance of a stressful event with the purpose of preventing it or modifying it before it occurs" (p. 417). When using proactive coping, individuals are not preparing to cope with a specific stressor but are, instead, acquiring skills and attaining resources that can be used to

prepare for general stressors (Aspinwall & Taylor, 1997). The authors suggest five different stages within proactive coping: resource accumulation, recognition of potential stressors, initial appraisal of the status of the potential stressor, initial coping efforts that prevent/minimize the impact of the stressor, and the elicitation and use of feedback in assessing the demand and whether one's efforts at preventing/minimizing the impact were successful (Aspinwall & Taylor, 1997). Teachers who engage in proactive coping might be adept at accumulating resources, such as sample lesson plans and exam templates from other teachers, and at recognizing events in their job that tend to cause them stress, such as turning progress reports in on time, and plan ahead in order to accomplish the task within the intended timeframe. In these examples, the coping occurs before the demand actually becomes stressful, and proactive coping can prevent individuals from experiencing a stress response.

The transactional model of stress and the associated coping literature delineate a helpful framework in conceptualizing the complex interaction that occurs between a teacher's school and classroom environment and his perceptions of that environment. This process helps researchers understand how some teachers in a school environment might experience a great deal of stress while others seem to be thriving. In the proposed study, the CARD will be used to identify teachers who are at lower levels of risk for stress in order to interview them about their experiences. Hobfoll's (1989) COR model could have a helpful perspective when interviewing low-risk teachers.

Hobfoll (1989) developed the COR model both because he disagreed with the models of stress available at the time and because he found these models of difficult to test empirically. Hobfoll (1989) disagrees with Lazarus and Folkman's (1984) focus on individual perceptions as central to the understanding of the stress process, but COR is still considered a balance model because it states that amounts of environmental demands threaten to deplete individuals' accumulation of resources, which then causes a stress response (Meurs & Perrewé, 2011). COR states that individuals become stressed when they experience the loss of resources, the threat of the loss of resources, or a lack of additional resource accumulation. Rather than focusing on

individual appraisals, COR states that important appraisals are objective and commonly held by multiple individuals in the same environment (Hobfoll, 2011). He states that rather than perception, these common appraisals reflect reality (Hobfoll, 1989). Common appraisals of the loss of resources are what causes stress, according to COR (Hobfoll, 2011).

In order to ward off stress, individuals accumulate and protect valued resources (Hobfoll, 2011). There are four types of resources that an individual can accumulate, including energies, personal characteristics, conditions, and objects. Energies include "time, money, and knowledge" that can aid individuals in the acquisition of the three other types of resources (Hobfoll, 1989, p. 517). Personal characteristics include skills and personality traits that can help individuals resist stress; individuals who have personal characteristics usually have a positive orientation toward life, see life as predictable, and have a good deal of social support. Conditions involve resources that are "valued and sought after" and include such things as "marriage, tenure, and seniority," (Hobfoll, 1989, p. 517) and could also include having a flexible work schedule or living close to family. Objects are the most straightforward type of resource: they are valued because of what they can offer or because having them also includes an importance in status, such as owning a home (Hobfoll, 1989). When individuals are threatened with the loss of resources or suddenly lose resources, they become stressed (Hobfoll, 2011).

Individuals use the current resources that they have in order to acquire and develop new resources to help ward off future losses in order to gain a surplus of resources (Hobfoll, 1989; Hobfoll et al., 1998). Individuals who have acquired a surplus of resources are able to function well and do not become stressed. When individuals cannot accumulate such resources, they are thought to be vulnerable to stress when they encounter events that deplete or threaten to deplete their resources (Hobfoll, 1989).

COR also posits that moving through cycles of losing resources and gaining resources occurs in "chronically stressful situations," such as work environments that are resource-depleted (Hobfoll, 2011, p. 118). These cycles can happen rapidly, in that individuals and the workplace can quickly lose resources that prevent them from attacking not only the current stressor, but

leave them with fewer resources to meet upcoming challenges and stressors (Hobfoll, 2011). On the other hand, gaining resources can also happen rapidly: when faced with an event that has the potential to deplete resources, individuals and the workplace can rally and obtain additional resources in order to meet the current stressor and future stressors (Hobfoll, 2011). Hobfoll (2011) argues that successful workplace environments "offer a 'members marketplace' of shared resources, imbue their departments, sections, managers, and employees with resources, and facilitate the internal transaction of resources to meet the organization's mission" (p. 118). These aspects of a work environment can create what Hobfoll termed a "caravan of resources," which make it easier for all individuals in the environment to ward off stress (p. 118). On the other hand, workplace environments without these caravans make it difficult for employees to access and accumulate resources. Thus, in the COR model, entire workplace environments are likely to be resource rich or resource depleted (Hobfoll, 2011), making it easier or harder to resist stress for individuals in that environment.

The COR model was first developed to help explain the outcomes of traumatic stress and major stressors, but it has more recently been used to help explain both stress and resilience that occur in workplace environments (Chen, Westman, Hobfoll, 2015). Chen and colleagues (2015) state that "Thriving and resilience are fostered by circumstances where people are able to apply, grow and sustain their personal, social and material resources" (p. 96). Thus, individuals who are resilient and thriving in work environments are doing so because they can use and acquire more resources to help them deal with future losses. Hobfoll's (1989) COR model has been used in research with teachers that has a positive psychology focus, hoping to investigate teacher wellbeing (Cheung et al., 2011).

Positive Psychology and Teacher Thriving

The field of resilience was influenced by the positive psychology movement, which focuses on positive traits of individuals, what makes life meaningful, and what allows people to flourish rather than focusing on pathology (Seligman & Csikszentmihalyi, 2000). Relating this to the field of stress and coping, studying resilience includes investigating what allows individuals

to thrive in challenging environments rather than examining how individuals become stressed and the negative consequences associated with being stressed (Greenfield, 2015).

Masten, Best, and Garmezy (1990) defined resilience as 'the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (p. 425). Research on resilience initially investigated only intrapersonal characteristics that allowed children and adolescents to emerge unharmed when faced with adversity (Masten et al., 1990), but has more recently begun to include the context and environmental as well as intrapersonal factors that allow individuals to thrive under adversity (Greenfield, 2015; Howard & Johnson, 2004). Within the last 15 years or so, research on resilience has moved away from studying only children and adolescents and toward studying what allows adults to thrive in challenging workplace environments, including teaching (Greenfield, 2015).

Studying resilience in teaching is a relatively new area of inquiry. Teacher resilience had been defined as "a dynamic process or outcome that is the result of interaction over time between a person and the environment" (Beltman et al., 2011, p.188). An early study of teacher resilience in Australia examined teachers who worked in high poverty and high turnover schools who were also identified by their principals as doing and coping well (Howard & Johnson, 2004). Interviews with these teachers found that teacher agency (their perceived amount of control over their circumstances), strong social support, and competence/a sense of achievement were important factors in helping teachers thrive (Howard & Johnson, 2004).

Two recent reviews of resilience within teaching have found that while there are common threads to this research, the field has not reached consensus on all of the factors involved in teacher resilience (Beltman et al., 2011; Greenfield, 2015). Greenfield (2015) investigated the conditions that promote teacher resilience and found that the conditions fell within three main categories: beliefs of the individual, actions, and relationships with others. Beliefs that promoted resilience were hope, a sense of purpose, and self-efficacy; actions included problem-solving, professional development, stress relief, and reflection and reframing; and relationships included support from colleagues, support from family/friends, strong and supportive leadership, and

relationships with students (Greenfield, 2015). It is important to note that there are actions that schools and administrators can take in order to promote resilience in their teachers, in addition to actions that teachers can take themselves.

Beltman and colleagues (2011) found consensus in studies that described teachers with resilience as being able to cope with a setback and quickly return to their normal level of functioning and maintain a sense of wellbeing. The authors reviewed 50 articles on resilience and thriving in teaching, and they concluded that while there seems to be a consensus on what contextual factors are necessary for resilience (mainly support from various relationships, including those with students and administrators), the individual factors promoting resilience were "idiosyncratic:" the study found nearly 30 different individual factors in the 50 studies (Beltman et al., 2011, p. 193). Research from a qualitative study fits with the idiosyncratic nature of resilience. A two-year longitudinal study of four beginning science teachers found an overlap in participants' responses to the individual skills and creation of support systems involved in building resilience (Doney, 2013). However, the author found that when encountering stressful situations, "each individual handled that stress differently, calling upon various combinations of support systems, physical activity, and direct action to alleviate the stress. No two participants had the same combination of protective factors, nor the same degree with which they applied those protections to the stress" (Doney, 2013, p.657). The author's description of resilience seems, in essence, very similar to coping. Resilience, then, is built when encountering challenging and stressful situations, but in turn, has an impact on how individuals cope with future demands.

Another related concept within the positive psychology literature, psychological capital, was developed in order to bring positive psychology research into the workplace. Psychological capital investigates states (rather than traits) that can be developed to positively impact "attitudes, behaviors, and workplace performance" (Luthans, Luthans, & Avery, 2014, p. 192). Through research with this construct, the authors have found that psychological capital involves four different positive organizational behavior states that form the higher order construct of

psychological capital—efficacy, optimism, hope, and resilience (Luthans et al., 2014). Defined in this way, resilience is one part of the larger construct of psychological capital. However, the relationship between the two constructs might not be clearly defined; as mentioned earlier, other research has found that self-efficacy is a part of resilience (Greenfield, 2015), while Luthans et al. (2014) state efficacy is a part of psychological capital.

In research with psychological capital in the workplace, the authors have found positive correlations between psychological capital and job satisfaction and work performance and negative correlations with stress, intentions to leave, and anxiety (Luthans et al., 2014). It has also been hypothesized as a possible method to increase employee engagement in their jobs (Thompson, Lemmon, Walter, 2015). Other researchers have located the construct within the framework of Hobfoll's (1989) COR model of stress, as one of the personal characteristics resources that can help individuals resist stress (Siu, Cheung, & Lui, 2015).

Studies of psychological capital within the teaching profession have shown promising results. A study of Chinese teachers found that psychological capital was positively associated with job satisfaction and negatively associated with burnout symptoms (Cheung et al., 2011). It has also been shown to be associated with an increase in creative teaching methods in Taiwanese physical education teachers (Huang, Liu, Hsieh, & Chang, 2015). Research has demonstrated that psychological capital partially mediated the relationship between work stressors and increased symptoms of depression for Chinese university teachers, such that those who have increased work stressors and high psychological capital were less likely to show depressive symptoms than similar teachers with lower psychological capital (Shen et al., 2014). It is interesting that one of the elements of psychological capital is mentioned as one of the elements of resilience (efficacy), while the concept of psychological capital has these elements as two separate and distinct components.

Studying teacher wellbeing from a positive psychology perspective—in essence, what is going well for teachers rather than what is going poorly—has the potential to help researchers, teachers, and administrators understand how to better support and develop teachers so that they

thrive. Rather than simply mitigating problems and decreasing stress, studying teachers from a positive psychology perspective allows us to find out how teachers and their schools are helping teachers thrive and prevent stress from actually occurring.

The positive psychology research on teachers reviewed above has been conducted in foreign countries or in the U.S. with traditional public school teachers. Research on wellbeing in charter school teacher is lacking. Charter school teacher research will be reviewed next. I will make the case that because charter school teachers have a stressful working environment and higher attrition than traditional public school teachers, it is vital to understand how some teachers are thriving in such challenging environments.

Charter School Teachers

Before reviewing research on working conditions and attrition and stress in charter school teachers, I will briefly review the history of charter schools in the United States and what makes them different from other public schools. In comparison to the history of traditional public schools in the United States, charter schools are a relatively new development: they were first envisioned in 1988 and the first school opened in the 1991-1992 school year (Kahlenberg & Potter, 2015). Charter schools are open-enrollment, tuition-free, and publicly funded schools that have more freedom and autonomy from district and state level regulations. In exchange for this flexibility, they must meet the accountability standards outlined in their charter, or contract, with the state in which they operate (Charter School Enrollment, 2015). If they do not meet these standards, the group governing the state's charter system can revoke the school's charter and close the school (Charter School Enrollment, 2015). Charter schools are sometimes run by local school districts and are, more often, run by charter management organizations or a group of people running only one school (Ni, 2012). The number of charter schools in the United States is growing at a rapid pace: data from the 2013-2014 school year show that there were 6,400 charter schools enrolling more than 2.5 million students (Kahlenberg & Potter, 2015). Between the previous school year and the 2013–2014 school year, charter school student enrollment rose by 13% (Kahlenberg & Potter, 2015). On average, charter schools serve a greater percentage of

minority and low-income students than traditional public schools (Characteristics of Traditional Public and Public Charter Schools, 2015).

Working conditions in charter schools. Charter schools were originally envisioned by the American Federation of Teachers president in 1988 with the goal of allowing teachers to have greater decision-making power (autonomy) over schools (Kahlenberg & Potter, 2015). Charter schools would be led by teachers who had the freedom to implement innovative teaching methods for a certain amount of time, and they would be closed if their methods did not succeed (Kahlenberg & Potter, 2015). Thus, the goal of charter schools was directly aligned with giving teachers more autonomy over school management decisions and classroom instruction decisions, with the ultimate goal of increasing student learning and engagement (Malloy & Wohlstetter, 2003). Given that autonomy, as discussed in the previous section, is associated with positive outcomes for teachers, it would seem that teachers in charter schools would also have more positive occupational health outcomes.

Over the years, some researchers argue that teacher autonomy in charter schools has waned, while other research has found that autonomy in charter schools is greater than autonomy in traditional public schools. Kahlenberg and Potter (2015) argue that while charter school management is autonomous from district and state control, that autonomy fails to trickle down to teachers. Other researchers have noted that while charter school teachers have not held onto as much autonomy as the original vision for charter schools, they still report having more autonomy, particularly the school influence type of autonomy, than traditional public school teachers (Malloy & Wohlstetter, 2003; Ni, 2012; Renzulli, Parrott, & Beattie, 2011). Malloy and Wohlstetter (2003), in a review and qualitative study of working conditions in charter schools, found that teachers described having authority to make curriculum decisions in their school and classrooms. Their participants were able to teach in a more flexible manner, they made their curriculum materials "from scratch," shared with fellow teachers, and scrapped plans or resources that were not working (p. 230).

Another aspect of working conditions that is relevant to the charter school literature is the concept of workload. While the research does not have an exact definition of workload, it is typically operationalized in studies as the number of hours teachers work (Malloy and Wohlstetter, 2003). Research on working conditions has been mixed. Some studies have found that charter school teachers typically have an increased workload when compared to traditional public school teachers (Malloy, & Wohlstetter, 2003; Ni, 2012), while others have found no significant difference in the workload (Stuit & Smith, 2012). The differences are likely caused by the way workload is operationalized: Ni (2012) and Stuit & Smith (2012) both used nationally representative data from Schools and Staffing Survey from 2003-2004, but defined workload in different ways. Stuit and Smith (2012) used a categorical variable of those working 60 hours or more or less than 60 hours while Ni (2012) used a continuous variable measuring the number of hours worked.

Based on the data above, it cannot be inferred that charter school teachers have a higher workload than their traditional public school teacher peers. However, research within charter schools alone (not comparing traditional public and charter schools), demonstrates that charter school teachers find their workloads to be high. A study using data from 25 schools within one charter management organization (without a traditional public school comparison) found that 14% of teachers rated their workload as unmanageable (Torres, 2014). A qualitative study of 40 teachers in six urban charter schools found that teachers worked long hours and were worried about themselves and their colleagues eventually burning out (Malloy, & Wohlstetter, 2003). A case study of a second year charter school teacher found "her life, it seemed, was almost completely devoted to the classroom. [She] work each morning before the sun came up and stayed at school until after it set" (Clark, 2010, p. 215). This teacher also reported that her colleagues were equally consumed with work, even noting that their school administration expected them to put in 80-hour work weeks, which she found appalling. At the same time, however, she accepted that an incredibly high workload and a resulting high level of stress were simply part and parcel to her job as a teacher in her school (Clark, 2010). Thus, while researchers

have not determined whether traditional public and charter school teachers have similar workloads, it can at least be stated that some charter school teachers find their workloads challenging, though workload certainly varies among different charter schools.

A third aspect of working conditions that research on charter school teachers has investigated is relationships within the school, including relationships with colleagues, students, and administrators. Ni (2012) found that traditional public and charter school teachers viewed their principal leadership and sense of community and collegiality in a similar light. Relationships equally important in maintaining a healthy workplace in both types of schools. In the case study mentioned above, the author noted that the teacher's "survival as a teacher [was] at least partly dependent on the relationships she [was] able to maintain," with students and with other teachers, with whom she bonded over the "shared stress that threaten[ed] to burn her out on a daily basis" (Clark, 2010, p. 219). Research has found that positive perceptions of principal support and communication have a positive impact on the retention of charter school teachers (Margolis & Nagel, 2006; Torres, 2014). Malloy and Wohlstetter (2003) noted that teachers in their study worked collaboratively, shared resources, and worked toward a common vision with a shared philosophy of education. While it is not known whether these relationships can reverse negative outcomes for teachers, they are an important source of support for many teachers.

Charter school teacher occupational health: attrition, satisfaction, and stress. The three measures of occupational health that will be reviewed in this section are attrition, job satisfaction, and stress. While attrition of teachers overall is high, it is particularly high in charter school teachers. A study of charter school data from six different states over 1997-2006 demonstrated that attrition generally ranged from 20-25%, with attrition of teachers new to their schools at a particularly alarming 40% (Miron & Applegate, 2007). Most studies have found that when comparing charter and traditional public school teachers, charter school teachers leave at a higher rate (Renzulli et al., 2011), sometimes as much as twice as often: 24.2% versus 11.9% who either left teaching or switched to another school (Stuit & Smith, 2011). Research has also suggested that charter school teacher turnover is associated with principal turnover (Sun & Ni,

2015). These findings all point to the fact that charter school teacher turnover is creating an unstable school environment. In the words of Miron and Applegate (2007), "High attrition consumes resources of schools that must regularly provide pre- and in-service training to new teachers [and] it impedes schools' efforts to build professional learning communities and positive and stable school cultures" (p. 2). The picture of charter school teacher turnover painted by this research is bleak.

Stuit and Smith (2011) conducted a study to examine the gap in teacher turnover in charter schools and traditional public schools, using data from the Schools and Staffing Survey. They examined a large number of variables that might explain some of the gap in turnover. The variables they examined explained 61.0% of the variance in the gap, with 41.9% explained by teacher characteristics. The largest amount of variance within teacher characteristics was the percentage of new teachers (which they defined as less than 3 years of experience): the fact that charter schools had a greater percentage of new teachers than traditional public schools accounted for 14.9% of the variance in the turnover gap (Stuit & Smith, 2011). The percentage of uncertified teachers at charter versus traditional public schools accounted for an additional 12.4% of the variance (Stuit & Smith, 2011). They did not find that differences in working conditions or school context variables (including percentage of minority and low-income students) between the two types of schools accounted for a significant portion of the variance in the turnover gap (Stuit & Smith, 2011). The most important factors in charter school teacher turnover seem to be teacher characteristics.

Based on Stuit and Smith's (2011) study, it seems that the lack of experience and smaller percentage of certified teachers in charter schools have an impact on what types of teachers are leaving. Other research on charter school teachers has found similar results. Miron & Applegate (2007) found that younger charter school teachers, teachers with less teaching experience, teachers who had been at their schools for fewer years, and uncertified teachers were all more likely to leave their schools. Some have argued that unlike teachers in traditional public schools, charter school teacher attrition is higher because charter school teachers never intended to stay

teaching for their entire careers and are more likely to be alternatively certified (through programs such as Teach For America; Teach Plus, 2012). Ingersoll (2001) found that newer teachers leave their jobs and the profession at a greater rate, and charter schools have a significantly larger number of younger and inexperienced teachers than traditional public schools, thus, a much higher teacher attrition rate (Stuit & Smith, 2011). The results also match data from BTLS, which found that 30.2% of teachers without certificates left teaching versus 14.6% of teachers with a regular teaching certificate (Gray & Taie, 2015). Interestingly, information from BTLS data somewhat contradicts the finding that younger teachers are leaving at greater rates. When look at all public school teachers (traditional public and charter school teachers combined), teachers who began teaching when they were younger than 30 years old left at lower rates than those who began teaching at 30 years or older: 15.5% versus 21.9%, respectively (Gray & Taie, 2015). It seems that more research needs to be conducted in order to decipher exactly how teachers' ages impact their retention, but it does seem clear that, especially for charter school teachers, level of experience and certification do have a significant impact.

Research on job satisfaction in charter school teachers has tied satisfaction/dissatisfaction to teachers' reasons for leaving their schools or the profession altogether. In one study, twenty percent of charter school teachers who left listed "dissatisfaction with previous school or teaching assignment" and about 9% listed "dissatisfaction with teaching as a career" as the reason they were leaving the profession or moving schools, while about 7% and 5% of TPS teachers listed those reasons, respectively (Stuit & Smith, 2011, p. 276). Satisfaction or dissatisfaction with their school's "1) mission, 2) perceived ability to attain the mission, and 3) administration and governance" had a significant association with charter school teachers' attrition in another study (Miron & Applegate, 2007, p. 2). Teachers in the same study who left were also less satisfied with other areas of their jobs, such as salary, resources, and curriculum (Miron & Applegate, 2007).

While those who are less satisfied are more likely to leave, other research has shown that overall, charter school teachers are more satisfied with their jobs than traditional public school

teachers, when looking at all teachers, not only the ones who leave (Renzulli et al., 2011). Renzulli and colleagues (2011) concluded that charter school teachers were more satisfied because they had more autonomy in their jobs than traditional public school teachers. Milliman and Maranto (2009) examined the satisfaction of teachers in Arizona. Rather than studying charter school teacher satisfaction, they looked at traditional public school teachers' satisfaction in areas that had a significant number of charter schools. They found interesting results: traditional public school teachers in areas with more charter schools were more dissatisfied than traditional public school teachers in areas without many charter schools. They interpreted the results to mean that traditional public school teacher dissatisfaction was driving teachers to leave and start charter schools, which matched results from the qualitative study years earlier (Milliman and Maranto, 2009). The research points to an interesting conclusion: that charter school teachers might be, overall, more satisfied with their jobs than traditional public school teachers, but charter school teachers are still leaving in greater numbers than their traditional public school peers. The research is clear, however, that those charter school teachers who are dissatisfied with their jobs are more likely to leave.

Research on teacher stress in charter school teachers has not yielded many studies. The search for literature on this topic revealed only three studies. The case study mentioned earlier noted that the teacher in a constant state of stress (Clark, 2010), which matched results from another qualitative study that found that teachers worked long hours and were worried they might burn out (Malloy & Wohlstetter, 2003). Another qualitative study on the effects of administrators found that teachers' relationships with administrators mediated teacher stress in an education reform charter school with a fast pace of change; those who had a positive relationship were able to withstand the stress they experienced at their schools and tended to stay in their roles (Margolis, & Nagel, 2006). While the research has demonstrated that charter school teacher workload is sometimes higher that TPS teachers and that some teachers find this workload unmanageable, teachers' perceptions of their work environments and what allows them to thrive in challenging environments remains to be studied.

Proposed Research Study Methodology

Overview and Predictions

The study proposes to explore the experience of stress and coping for teachers who are, based on a quantities measure of stress, at lower risk for vocational stress. I will first briefly describe the study and then review it in detail below. I will first recruit approximately 30-50 elementary charter school teachers to take the CARD (Lambert et al., 2009) in an online questionnaire using Qualtrics. Analyzing the results from the CARD will allow me to classify the teachers into three groups (Resourced, Balanced, and Demand) based on their risk for stress. I will invite participants from the Resourced and Balanced groups to be involved in the interview portion of the study. The quantitative data will be used for descriptives and for participant selection only. I will use qualitative methodologies to investigate the research questions for the study. The research questions for the study are:

1. How do Resourced and Balanced elementary charter school teachers describe what allows them to thrive?
2. What types of coping strategies and resources are these teachers using?
3. What role, if any, does teachers' autonomy play in these teachers' ability to thrive?
4. In what ways do Resourced and Balanced teachers differ with respect to research questions one and two?

Because the proposed study is both qualitative and inductive in nature, I do not have specific hypotheses about the nature of the results. I do expect participants to mention both school environment and personal processes that are occurring in their experience with stress, consistent with previous research on teacher resilience. I expect that teachers will have varied experiences with stress, with some of them likely describing that they are coping well and others feeling that they might not be coping well. Results will be analyzed using a specific qualitative methodology that will allow me to describe balanced and resourced teachers' experiences with stress, analyze the results according to patterns in the data, and organize those results based on the analysis.

Approval by Human Subjects Committee

The proposed study will be in full compliance with the published guidelines established by the Institutional Review Board for the Protection of Human Subjects at The University of Texas at Austin.

Participant Selection and Recruitment

Elementary teachers were chosen as opposed to secondary for three reasons. First, the CARD was initially developed for use with elementary teachers before being modified for secondary teachers (Lambert et al., 2009) and in recent research, the CARD performed differently for elementary and secondary teachers (McCarthy et al., 2016). Thus, it seems important understand the specific environments of elementary teachers. Second, on the MetLife Survey of American Teacher, 59% of elementary teachers responded that they experienced high stress (this number was 44% for middle and 42% for high school teachers), which is an alarming rate (Markow & Pieters, 2012). It seems important to understand how some elementary teachers are able to resist the stress that plagues so many of their colleagues. Third, in exploratory qualitative research, it is important to have participants that are similar enough to each other in order to describe the experiences of the sample.

The study will recruit approximately 30-50 elementary charter school teachers. The participants' responses will classify them into three groups (explained below). This number of teachers is needed in order to have a substantial pool of potential participants from the Resourced and Balanced groups to complete the interviews. It is expected that not all participants in these two groups will elect to participate in the interviews, thus, it is important to recruit more than the expected number of teachers who will fall into the two groups.

The inclusion criteria for participation will be participants in the study will be 1) current employment as an elementary charter school teacher in any subject or grade level; 2) agreement to complete and approximately 10-minute online survey; 3) current employment at a charter school that is part of a charter management organization, such as KIPP and IDEA rather than a single school. There are no additional exclusion criteria that would prevent teachers who meet the inclusion criteria from participating in the study. Participants will likely teach a variety of

subject areas and grade levels, will have varied levels of experience in teaching and at their schools, and will hopefully have a range of different ages and ethnic backgrounds.

Recruitment will take place in a number of ways. First, administrative contacts with two local charter school districts in the city of Austin will be contacted via email. Contacts will be asked if they can allow teachers to take this survey during their in-service professional development days before students come back to school in the fall. Second, the study recruitment email will be sent out to other charter school contacts around the state, and those contacts are welcome to forward the email to potential participants. Third, the study will be posted on social media. Participants recruited through the second and third methods will be able to take the online survey on their own time.

Measures and Data Analyses

The CARD. The Classroom Appraisal of Resources and Demands (CARD, Lambert et al., 2009) was developed to assess teachers' risk for stress by investigating their appraisals of classroom demands school-provided resources and can be found in Appendix A. This measure operationalizes the transactional model of stress (Lazarus & Folkman, 1984) within the vocation of teaching, specifically (McCarthy et al., 2015). The CARD is composed of two separate sections, Demands and Resources. The Demands section (which corresponds to the primary appraisal, described earlier) is composed of 35 different items. These items ask participants to rate how demanding they find specific demands that occur in the classroom. Participants rate each item on a five-point Likert scale according to the severity of the demand (1= "not demanding" and 5= "extremely demanding"). The items cover four different areas of demands: students with problematic behaviors (sample item: children who do not follow directions), other student-related demands (sample item: children with poor attendance), administrative demands (sample item: meetings you have to attend), and lack of instructional resources (sample item: instructional resources and materials that are outdated).

The Resources section of the CARD (which corresponds with the secondary appraisal) is composed of 30 items of potential school-provided resources. Participants are asked to rate the

helpfulness of each resource using a 5-point Likert scale (1= "very unhelpful" and 5= "very helpful"). Items in the Resources section cover four different areas: school support personnel (sample item: administrators at your school), other adults in the classroom (sample item: aides/assistants), instructional support (instructional supplies provided by your school or program), and specialized resources (materials for children performing below grade level).

Analyses from the CARD assigns participants both a "Demands" and a "Resources" score. The transactional model of stress posits that teachers with higher Demands scores than Resources scores are at greater risk for experiencing vocational stress. In a 2009 study by Lambert et al., the two-factor structure of the CARD was supported through multi-level confirmatory factor analysis. The Demands and Resources had an estimated correlation of -.250, which is similar to correlations from other studies using the CARD (McCarthy et al., 2015). The Demands scale and the Resources scale have acceptable reliability scores, with a mean of coefficient alphas at .926 and .949, respectively, in a study that reviewed and summarized CARD research (McCarthy et al., 2015).

Previous studies have created a difference score by calculating the difference between the Demands and Resources scores (McCarthy et al., 2015). The proposed study will follow the same procedure to create a difference score. The formula for reliability of a difference score (Crocker & Algina, 1986) will be used to examine whether a difference score can be reliably calculated. Attaining reliable difference scores can be a challenge, as it is dependent on the two scales' individual reliability and their correlation with each other (Crocker & Algina, 1986; Hoffman & Schraw, 2010; Lambert et al., 2009). In previous research, obtaining a difference score that assesses teachers' perceptions of their Demands vis-a-vis their Resources has been possible for two reasons: 1) the CARD is sufficiently reliable and 2) the two subscales have a low correlation (McCarthy et al., 2015). The difference score (Demands-Resources) is used to create an Appraisal Index standard error of measurement and a confidence interval around an Appraisal Index score of 0, which indicates there is no difference between the scores on the Demands and Resources subscales. The difference score is called an Appraisal Index because it

represents teachers' appraisals of whether the classroom demands they encounter outweigh the resources they have to meet those demands. The typical distribution of Appraisal Index scores can be seen in Figure 3 below.

Calculating the confidence interval allows researchers to identify participants who have Demands scores that outweigh their Resources by enough of a difference to be beyond the measurement error and classify teachers into three groups. Previous research has classified teachers into the following three groups: Resourced, those who perceive their resources as greater than their demands; Balanced, those who perceive their resources and demands as equal; and Demands, those who perceive their demands as greater than their resources (McCarthy et al., 2015). Using the confidence interval around the standard error of measurement allows for a 95% confidence that there are differences in the true scores between members of the Resourced and Balanced groups of teachers and Demands and Balanced groups (Lambert et al., 2009). The distribution of group classifications can be seen in Figure D3.

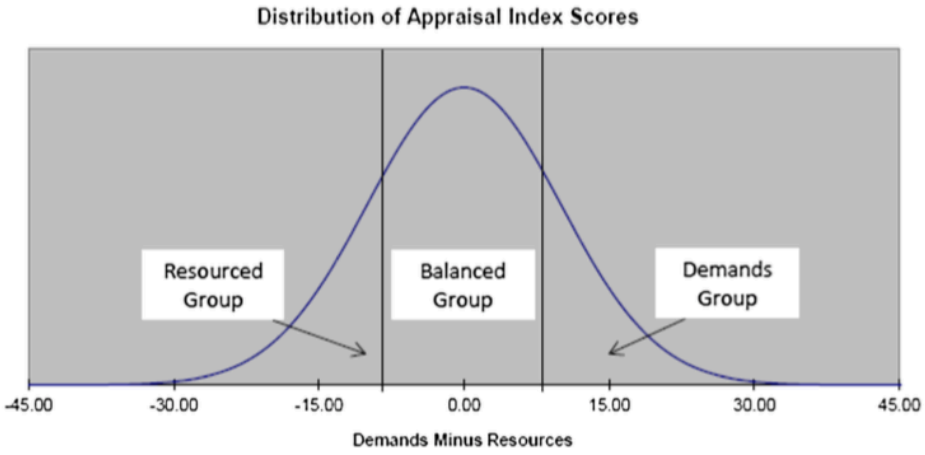

Figure D3: Distribution of Appraisal Index Scores and Group Classifications (McCarthy et al., 2015)

In the proposed study, the purpose of separating participants into three different groups is to target certain teachers for the qualitative interview process. Only teachers in the Balanced and

Resourced groups will be interviewed. Thus, analyses of CARD results are an important step in order to obtain participants for the study.

The online questionnaire will also include a brief demographic questionnaire will ask participants for their age, gender, ethnicity, grade level taught, and number of years both as a classroom teacher and as a teacher at their current school. Descriptive statistics will be calculated in order to describe teachers in the three groups. The online questionnaire will also ask participants if they would be willing to participate in a follow-up interview if they qualify for the follow-up interview. If they are interested, they will be able to give their email address.

Procedures

Immediately after participant recruitment, teachers will be able to take the online questionnaire, which will include the CARD and the brief demographic questionnaire. After 30-50 participants have completed the CARD (and a sufficient number have indicated that they would be willing to participate in a follow-up interview), recruitment will cease. As discussed above, the CARD scores will be analyzed used to create an Appraisal Index. The Appraisal Index will then be used to determine which of the three groups the participants are categorized into based on pre-determined cut-off scores (Lambert et al., 2009). Once participants are placed in three groups, interviews can begin.

Interview Procedures and Participants

Participants. Participants for interviews will be recruited from the pool of participants who 1) expressed interest in by giving their email address in the online questionnaire and 2) fell into the Resourced and Balanced groups of teachers. I will interview somewhere between eight and 15 participants, as suggested by Hill et al. (1997), the developers of Consensual Qualitative Research (CQR), the qualitative research methodology that will be employed. I would like to have an approximately equal number of participants who feel in the Resourced and Balanced groups of participants.

Procedures. I will email qualifying participants to inquire whether they would like to participate in interviews. A total of two emails will be sent before it is assumed that participants

are not interested in continuing with the study. It will be explained to participants that after fulfilling their participation, they will be compensated with a $50 Amazon Gift Card. Once participants agree to participate, an initial interview will be scheduled. Participants will complete an initial interview, which is expected to last between 45 minutes and 90 minutes, depending on participants' verbosity. I will conduct and audio-record all of the interviews myself. The interviews will be phenomenological, semi-structured interviews, with set questions, but also allowing for the freedom to ask follow-up or clarification questions as needed. After transcribing the interview (with help from research assistants or members of our research lab), I will note areas I would like to probe or clarify. I will then set up an additional 15-30-minute follow-up interview to answer additional questions via either phone, Skype, or in-person. Initial interviews will be conducted in-person or via Skype. All in-person interviews will take place at the location preference of the participant: at their homes or at the University of Texas (for Austin-area participants). All interviews and follow-up interviews will be transcribed in full. Transcriptions will be sent to participants, asking them if they would like to make any changes or if they have ay additional thoughts.

The interview protocol has been developed based on research in teacher stress and coping, charter school teachers, and teacher resilience and thriving. The questions in the interview protocol are below. The order of the questions and some of the questions themselves might change slightly after feedback from pilot interviews with two charter school teachers.

1. Tell me how you became a teacher.
2. How often are you excited to come to work?
3. What about your job makes you excited to come to work every day?
4. Do you consider teaching to be an important part of your identity or who you are? If so, how so?
5. Why/how did you choose to work at your current school?
6. Describe one of the most stressful experiences you've had while working at this school this year.

7. Describe what you did to work through that experience. How did you cope?
8. On a daily basis when you run into stressful situations, describe some of the things you might do to cope.
9. How do you alter your coping based on the stressor?
10. What kinds of personal resources do you have that help you prevent or manage stress as a teacher? (e.g. good relationships with family, supportive significant other, financial resources).
11. What kinds of professional resources do you have in your environment that help you prevent or manage stress as a teacher?
12. What relationships do you have that help you prevent or manage stress as a teacher?
13. What skills/abilities do you have as a teacher that help you prevent or manage stress as a teacher?
14. How free do you feel to make decisions about your own classroom, such as decisions about curriculum, lesson plans, and student discipline issues?
15. How much are you a part of school-wide decisions, such as the hiring of new teachers or setting up school-wide behavior management policies?
16. How does your inclusion in decision-making within the school and classroom have an impact on your work?
17. Do you think you handle the challenges of being a teacher in the same way or better than your peers?
18. What ways of coping do you have that you would recommend to colleagues?
19. What sustains you in this work?
20. What makes you stay in teaching?
21. How long do you plan to stay in teaching?
22. Is there anything else that I did not ask, but that you think is relevant to this study that you would like to tell me?

Questions in the follow-up interview will ask participants about their experience in the interview process, for clarification on any content that seemed unclear after transcription, and for anything that they would like to add.

Qualitative Data Analysis

The interviews will be analyzed following the guidelines of Consensual Qualitative Research (CQR) (Hill et al., 1997). CQR was developed by a counseling psychologist and colleagues in order to describe phenomena in their context, allowing researchers to describe data using their own judgment rather than being confined to categories that are predetermined (Hill et al., 1997). CQR has two key features that make it a distinctive methodology. First, it emphasizes having multiple researchers review and analyze the data independently before coming to consensus interpreting the data. Second, CQR examines how representative the results are for the sample.

The process of analyzing data using CQR involves several main steps (Hill et al., 1997), which will be followed closely by the research team. First, all interviews are completed and transcribed before data analysis begins—a difference between CQR and other qualitative methodologies, which, many times, involve "alternating between data gathering and data analysis" (Hill et al., 1997, p. 521). Second, members of the research team individually read through a random sample of interviews (usually about one third of the total number of participant interviews) and divide the interviews into topics of interest, called domains. The team then meets and arrives at a consensus of the list of domains. Third, the members of the research team individually develop themes or codes, called core ideas, that summarize material within all of the domains for the set of random interviews. Again, the team then meets to arrive at a consensus.

Fourth, the team further analyzes the core ideas under each domain by selecting another couple of interviews at random to investigate whether the core ideas from the previously analyzed interviews fit the new interviews (Hill et al., 1997). Changes and adjustments to the core idea list are made during this process as necessary by reaching consensus with the whole team. Fifth, the team re-codes all of the interviews using the core idea list individually and then

reaches consensus on the core ideas. At this stage, it is still possible to make slight changes in the list of core ideas. Sixth, the core ideas are then analyzed to determine the frequency with which they appeared in the sample. In the current study, an online program called Dedoose will be used in order to help determine core idea frequency and help pull out representative quotations from each core idea. Throughout the data analysis process, an auditor, who is not part of the consensual meetings, serves as an additional validity check in core idea development and application. The auditor makes suggestions to the research team, who decide whether or not to implement the auditor's suggestions.

Within qualitative methodologies, the researchers are important instruments of the study; in other words, it is impossible to remove all of one's biases and look at the data completely objectively, because researchers have their own experiences, histories, and worldviews (Hill et al., 1997). Because of the potential for researcher bias and positionality to influence the data (Hill et al., 1997), a team of three to four researchers, with varying levels of experience in teaching and research, will be included in the research team. I am a former teacher, and I will conduct all interviews and lead the analysis team. Other members of the analysis team will transcribe interviews and be involved in the entire data analysis process. One of the members is also a former teacher who is a graduate student in educational psychology. The other members will be an undergraduate in psychology and a psychology graduate student. The auditor is my advisor, a professor with expertise in stress and coping in education.

Validity Concerns. Threats to validity will be addressed in several ways. First, we will give participants the opportunity to read their transcriptions and make changes or clarify points. Second, it is my intention that members of the data analysis team have diverse experiences within education, research in education, and charter schools, reducing the likelihood of researcher bias. Third, having the research team members individually code the interviews before coming to consensus allows for all perspectives to be equally heard. Fourth, I will be able to ask for clarification in follow-up interviews, allowing time to settle any ambiguity in the initial interview. Fifth, the research team will actively look for data that do not fit into our core ideas

and discuss these negative cases (Maxwell, 2013) in order to revise core ideas, if necessary. Sixth, peer debriefing with a professor who is not participating in the research itself will serve as both inquiry and confirmatory audits (Lincoln & Guba, 1985).

Autonomy Questionnaire:

Classroom Control:

How much actual control do you have IN YOUR CLASSROOM at this school over the following areas of your planning and teaching?

- selecting textbooks and other classroom materials
- selecting content, topics, and skills to be taught
- selecting teaching techniques;
- evaluating and grading students;
- disciplining students;
- determining the amount of homework to be assigned

For all questions, scale is

- 1=no control
- 2=minor control
- 3=moderate control
- 4=a great deal of control

School Influence:
How much actual influence do you think teachers have over school policy AT THIS SCHOOL in each of the following areas?

- Setting performance standards for students at this school
- Establishing curriculum
- Determining the content of in-service professional development programs
- Evaluating teachers
- Hiring new full-time teachers
- Setting discipline policy
- Deciding how the school budget will be spent

For all questions, scale is:

- 1=No influence
- 2=minor influence
- 3=moderate influence
- 4=great deal of influence

Source: https://nces.ed.gov/surveys/sass/pdf/0304/sass4a.pdf
Teacher Questionnaire. Schools and Staffing Survey. 2003-2004. U.S. Department of Education. National Center for Education Statistics.

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